

DOCUMENT RESUME

ED 215 291

CS 006 421

AUTHOR Degrosky, Deborah S.
TITLE Television Viewing and Reading Achievement of Seventh and Eighth Graders.
PUB DATE Oct 81
NOTE 138p.; M. Ed. Thesis, Rutgers The State University of New Jersey.

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Age; *Correlation; Grade 7; Grade 8; Intelligence Quotient; Junior High Schools; Middle Schools; Programing (Broadcast); *Reading Achievement; *Reading Research; Sex Differences; Socioeconomic Status; Television Research; *Television Viewing

ABSTRACT

Data were collected from 123 seventh and eighth grade students to examine the relationship between the quality of television viewing time and reading achievement, age, grade, sex, socioeconomic status (SES), and intelligence quotient (IQ). Highlights of the data analyses include the following: (1) The mean weekly viewing time for the subjects was 17.45 hours per week. (2) Viewing time ranged from over 34% for situation comedies to less than 1% for documentaries. (3) On a scale of 1-4 (low to high), the overall quality of viewing time for all the subjects was 1.82. (4) Boys spent significantly more time viewing news and sports programs and programs rated higher in quality. (5) Girls spent significantly more time watching music/variety programs. (6) Eighth grade students scored significantly higher on the reading test and came from homes significantly higher in SES than seventh grade students. (7) Seventh grade students spent significantly more time watching game shows and cartoon/fantasy programs than did eighth grade students. (8) Analysis of the statistically significant correlations involving grade level and subject sex accounted for only a very small percentage of the variance. (9) Quality of television viewing time had a statistically significant relationship to sex and reading test score. And (10) reading test score was significantly related to IQ, grade level, and quality of television viewing. (Author/RL)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED215291

TELEVISION VIEWING AND READING ACHIEVEMENT

OF SEVENTH AND EIGHTH GRADERS

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

* This document has been reproduced as
received from the person or organization
originating it.
☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

A THESIS

SUBMITTED TO THE FACULTY

OF THE GRADUATE SCHOOL OF EDUCATION

OF

RUTGERS

THE STATE UNIVERSITY OF NEW JERSEY

BY

DEBORAH S. DEGROSKY

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

MASTER OF EDUCATION

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Deborah S. Degrosky

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

NEW BRUNSWICK, NEW JERSEY

OCTOBER, 1981

APPROVED:

Martin Kling
Martin Kling

Joel Cadwell
Joel Cadwell

Kathleen Garland
Kathleen Garland

DEAN:

Irene Athey

CS686421

ACKNOWLEDGMENTS

I wish to express my appreciation to Dr. Martin Kling, advisor and committee chairperson, for his guidance and encouragement during the development of this study. He was most generous with his time. Appreciation is also extended to Dr. Joel Cadwell for his aid in the statistical analysis, and Dr. Kathleen Garland for her helpful insights.

A special thanks is directed to Mr. Joseph Stuby, superintendent, and Mr. Samuel Citron, vice-principal, of High Bridge Public Schools for their cooperation in obtaining the information for the study.

My sincere thanks are due to Mr. William Dolphin for his computer assistance.

I am especially grateful to my husband, Bill, for his unending encouragement and advice during the writing of this thesis.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
LIST OF TABLES	vi
Chapter	
I. INTRODUCTION	1
Background of the Problem	1
Statement of the Problem	3
Questions	3
Importance of the Study	4
Definition of Terms	5
Limitations of the Study	7
II. REVIEW OF THE LITERATURE	10
Studies of the '50s	10
Studies of the '60s	18
Studies of the '70s	20
Conclusions	27
III. PROCEDURE	32
Subjects	32
Testing Materials	32
Procedure	34
Treatment of the Data	37
IV. RESULTS OF THE STUDY	38
Question 1: Viewing Time	39
Question 2: Quality of Television Viewing Time	39
Question 3: Relationship Between Sex and Quality of Viewing Time	39
Question 4: Relationship Between Grade Level and Quality of Viewing Time	47

TABLE OF CONTENTS--Continued

Chapter	Page
IV. RESULTS OF THE STUDY--Continued	
Question 5: Relationship Between Total Weekly Viewing Time and the Independent Variables	53
Question 6: Relationship Between Program Category Viewing Times and the Independent Variables	55
Question 7: Relationship Between Quality of Viewing Time and the Independent Variables	60
Question 8: Relationship Between Reading Achievement and Selected Variables in a Stepwise Multiple Regression	62
V. SUMMARY, DISCUSSION AND CONCLUSIONS	64
Summary	64
Discussion	65
Mean Viewing Times	65
Effect of Sex on Variables Examined . .	67
Effect of Grade Level on Selected Variables	69
Relationship Between Total Weekly Viewing Time and Selected Variables .	70
Relationship Between Viewing Time in Each Program Category and Independent Variables	74
Relationship Between Quality of Viewing Time and Selected Variables Studied	76
Relationship Between Reading Level as a Dependent Variable (SDRT) and Independent Variables in a Stepwise Multiple Regression	77
Conclusions	78
Suggestions for Further Research	80
REFERENCES	82
APPENDIX A - BACKGROUND DATA ON SUBJECTS	85

TABLE OF CONTENTS--Continued

	Page
APPENDIX B - ADDITIONAL CORRELATIONS BETWEEN VIEWING TIME AND SELECTED VARIABLES BY GRADE LEVEL AND SEX . . .	95

LIST OF TABLES

Table	Page
1. Means and Standard Deviations of Selected Variables	38
2. Means and Standard Deviations of Hours of Viewing in Selected Program Categories	40
3. Comparison of Reading Achievement, Quality of Viewing Time and Selected Variables for Boys and Girls in the Seventh and Eighth Grade	41
4. Comparison of Reading Achievement, Quality of Viewing Time and Selected Variables for Seventh and Eighth Graders	48
5. Intercorrelations Between Total Hours of Viewing Time and Selected Variables for Seventh and Eighth Graders	54
6. Correlations Between Program Category Viewing Times and Selected Variables for Seventh and Eighth Graders	56
7. Correlations Between Quality of Television Viewing Time and Selected Variables for Seventh and Eighth Graders	61
8. Multiple Regression	63

CHAPTER I

INTRODUCTION

Background of the Problem

Parents and educators have long been concerned with the use children make of their time. Much of this concern has focused on the amount of time children spend watching television. In an A. C. Nielsen study reported in U.S. News and World Report (1979) the average hours of television usage per home in 1978 was cited as approximately six hours per day. Research indicates children's viewing somewhere between four and six hours per weekday night. When added to weekend viewing, it is estimated that the average child spends 30 hours per week watching television (Barth & Swiss, 1976). Even early studies conducted shortly after the appearance of television in American homes in 1949-50, reported a significant amount of time devoted to television viewing.

Witty (1967) found average viewing time of 20-21 hours per week in 1949-50. Greenstein (1954) reported an average of 3.9 hours per day viewing time. Schramm (1965) found children viewing as many as three to four hours in the late fifties. Many thought that viewing time would decrease when the novelty of TV wore off; however, this

has not been the case.

Due to this excessive amount of time spent viewing, there has been great concern among both parents and educators about the potential effects of this medium on children. Some have stressed the value of television in expanding children's experiences and in stimulating interests. Some parents have welcomed television as a "built-in baby sitter" and emphasized its worth in fostering improved family relations (Witty, 1967). On the other hand, many parents and teachers have blamed television for lowered academic achievement. They have assumed a direct correlation between number of televiewing hours and achievement in school. Parents have punished children for receiving bad grades in school by curtailing their viewing hours. By not watching television, it has been thought that children could then spend more time on homework (Childers & Ross, 1973).

Research on the relationship between television viewing and academic and reading achievement has centered on the number of hours spent viewing. Most studies have reported non-significant differences with a tendency toward lowered academic achievement on the part of heavier viewers. Almost no attempts have been made to see if there might be a relationship between types of programs viewed and reading achievement. It is possible that better readers are watching different types and thus

quality of programs than poorer readers.

Statement of the Problem

The purpose of this study was to determine if the quality of seventh and eighth grade students' television viewing time was related to their reading achievement. In addition to reading achievement, the relationship of quality to age, sex, grade, intelligence, and socio-economic status was also investigated.

Questions

The data were analyzed in order to answer the following questions:

1. What is the mean viewing time for the subjects of the study? What is the mean viewing time for each program category? Which types of programs are more frequently viewed by the students in this study?
2. What is the overall quality of television viewing for the subjects of this study?
3. Are there differences between boys and girls in the quality of TV viewing time and the other selected variables?
4. Are there differences between seventh and eighth graders in the quality of TV viewing time and the other selected variables?

5. What is the relationship between total weekly viewing time and the independent variables for the seventh and eighth grade students in this study?
6. What is the relationship between viewing time in each of the program categories and reading achievement and the other independent variables?
7. What is the relationship between the quality of viewing time and the independent variables?
8. When reading level is considered as a dependent variable and quality, intelligence, socioeconomic status, sex and program category viewing percentages are introduced as independent variables in a stepwise multiple regression, what is the magnitude of the relationship among the variables?

Importance of the Study

Concern about a medium which commands as much attention from children as television does, seems justified. Little research has been done to ascertain the effects of television on the reading and academic achievement of children. That which has been conducted, has focused on the variable of time in relation to reading or school achievement. No definitive conclusions have resulted from this type of research. Differences between light and heavy viewers are usually non-significant with

a tendency toward lower achievement among high frequency viewers. Perhaps it is not the volume of viewing alone that should be looked at, but rather the content of viewing time. It is possible that content of viewing time may differ widely among varying groups of students depending upon reading ability, intelligence or socioeconomic status. There is a need for research which addresses itself to this aspect of television viewing.

Definition of Terms

Reading Achievement - Reading achievement is defined as a raw score on the Comprehension portion of the Stanford Diagnostic Reading Test (SDRT) obtained through its administration as part of this study.

Intelligence - IQ is defined by the subject's Differential Intelligence Quotient (DIQ) obtained through the administration of the Otis-Lennon Mental Ability Test as part of this study.

Socioeconomic Status - SES is defined by the parental occupation level obtained on the scale devised by Otis Dudley Duncan (Reiss, 1961).

Viewing Time - Viewing time is defined as the time, measured in hours, spent watching television.

Quality of Television Viewing Time - Quality of television viewing time was determined through the assignment of a quality index number to each program

category. Hours of viewing time for each category were multiplied by the quality index number. The sum was then divided by the total weekly viewing time. The resulting figure represented the average quality of the student's viewing.

Program Categories - Categories for the programs are based on those used by Lyle and Hoffman (1971) and Jaronik (1975).

Adventure Program - The adventure program has a simple theme, frequently dealing with the solving of some infraction of the law. The hero or heroes control events and overcome all obstacles.

Cartoon/Fantasy Program - The cartoon/fantasy program is done with animated or comical, imaginary characters, or in the nature of fanciful or romantic themes.

Documentary Program - The documentary program is a factual show not presented at recurring times.

Drama Program - The drama program is of a serious nature and is shown at a scheduled time each week.

Educational Program - The educational program attempts to emphasize materials which will help educate the viewers both mentally and morally. Unlike the documentary, these programs are presented at a regular time.

Game Show - The game show deals with many types of non-athletic competition.

Movie Programs - Movie programs encompass both the recently made-for-television movies as well as the edited versions of films which were originally shown in movie theatres. These movies are usually shown at a particular time each week.

News Programs - The news program relates the events which have occurred at the local, state, national or international level. This type of show is aired a number of times a day, every day.

Situation Comedy - The situation comedy is a humorous program with a plot. These shows appear at regular intervals, usually once a week.

Sports Show - The sports show presents events which deal with athletic commentaries, events and endeavors.

Talk Show - The talk show format concentrates on the interviewing of guests by a host.

Musical-Variety Program - The musical-variety program specializes in light-hearted entertainment such as songs, dance and comedy skits.

Limitations of the Study

This study is necessarily limited to a sample of 123 seventh and eighth grade students in High Bridge, New Jersey. Generalizability of results to other age or grade levels is, therefore, limited. Replication of this study on a different grade level or the use of a larger sample might yield different results.

The study is also limited to the one week during March 1980 in which data was collected, and is therefore limited to the programs available to the viewing audience at that time. It must be recognized that a study of viewing habits over a longer period of time might yield different results.

Reading achievement has been defined in different ways throughout the literature. This investigator used the raw scores obtained on the Comprehension section of the Stanford Diagnostic Reading Test. The use of other criteria to define reading achievement could produce different results.

Socioeconomic status was defined using the occupational level scale devised by Otis Dudley Duncan (Reiss, 1961). Other measures of SES could produce different results. It must also be recognized that students furnished the data on their parents' occupations by means of a questionnaire. The accuracy of this information is, therefore, limited to the students' knowledge of their parents' occupations.

Students also provided the data on their viewing habits by means of a daily report. Accuracy of this information is limited to the students' honesty in reporting what they viewed.

Finally, the assessment of the television programs and their categorization is recognized as being somewhat

subjective on the part of the researcher.

CHAPTER II

REVIEW OF THE LITERATURE

Research regarding the effects of television on children has encompassed the social, affective, and cognitive realms. The focus of this literature review will be on research concerning television and cognitive learning. A chronological review of the literature will emphasize studies dealing with viewing habits, program preferences, and the relationship of these variables to school and reading achievement.

Studies of the '50s

When television first appeared in American homes in 1949 and 1950, it was looked on as a serious threat to reading (Smith, 1963) and school achievement. Research began almost immediately to examine the possible effects of this medium on children. In these early years of television, it was possible to compare two distinct groups of subjects, owners and non-owners of television sets. One of the first studies to examine two such groups was conducted by Greenstein (1951) in 1950. He compared the achievement of two small samples of sixth grade students (total N = 67); those who owned television sets with those who did not. He found that the group who

owned television sets achieved consistently higher grade point averages than those who did not own sets. This difference, however, was not statistically significant.

Analysis of the effect of varying number of tele-viewing hours upon grade point averages also failed to reveal a significant difference. He did find, however, that students who watched less than the daily mean of 3.9 hours had a higher grade point average than those who watched more than the daily mean. Principals of schools involved in this study expressed the opinion that students who neglected their homework to watch television, would neglect it for other reasons if television were not available.

In another study comparing the achievement of viewers with non-viewers, Clark (1951) surveyed almost a thousand sixth and seventh grade children from both public and parochial schools in the Cincinnati area. Again, no significant differences were found between the groups. In spite of this, Clark pointed out that the data revealed that poor television habits, lower IQs, lower parental control and poor school achievement tended to be found in the same child. Clark reported televiewing time at thirty hours per week at the time of this study.

Scott (1956) eliminated students not having television sets at home, in order to study the relationships between varying amounts of television viewing and school

achievement, IQ, and socioeconomic status of parent. Scott compared the upper and lower 27% of the 407 sixth and seventh graders in the study based on the distribution of total viewing time. Range of viewing time for the upper 27% was 22 3/4 hours to 69 1/2 hours per week. Viewing time for the lower 27% ranged from no hours to 9 3/4 hours per week. Comparison of mean achievement scores for these two groups showed no significant differences in the areas of language or spelling. Significant differences were found, however, in arithmetic, reading, and total achievement. All differences favored students in the lower 27% of the distribution. Significant differences were also revealed between the groups for parental occupation and intelligence. Children watching a greater amount of television had parents rating significantly lower on the socioeconomic scale and had lower IQ scores than children watching less television.)

Two benchmark studies appeared in the mid to late fifties. Himmelweit's study in England and Schramm's in the U.S. and Canada represented two of the most comprehensive studies done to investigate the effects of television viewing on children.

Himmelweit's studies began in 1955. This was still early enough in the era of television to permit comparisons of viewers with non-viewers. The "main survey"

of his study represents one of the very few quasi-experimental studies done in this field. Himmelweit used a system of individual matching, or a factorial design, to match each child from the viewing group with a "twin" non-viewer (control group). Using two age groups, 10 and 11 year olds and 13 and 14 year olds, members of each group were matched for sex, age, IQ and social class.

The large number of subjects in the viewing group (4,500) permitted two comparisons to be made within this group. The first examined the effects of viewing over time by comparing "recent" viewers with "experienced" viewers. The second comparison examined the degree to which the effects varied due to the amount of time which children devoted to viewing. A second study, the "Norwich before-and-after study" was designed to investigate characteristics of children before and after access to television. Various special studies were also conducted to investigate groups not covered by the original surveys, and problems for which other techniques were necessary. Himmelweit's extensive investigations provided a large amount of data. Average viewing time was found to be 11 to 13 hours per week for both age groups studied, with veteran viewers watching about two fewer hours than recent viewers. Intelligence was the most important factor in viewing time; the higher the IQ, the less the

child viewed. Socioeconomic status showed no relationship to viewing time. Himmelweit also examined the relationship between viewing and school achievement, finding a non-significant trend toward better performance on the part of the non-viewer control group. Data also revealed that "bright" children who were heavy viewers fell behind children of similar ability in school, while for the younger or "duller" children heavy viewing proved to be an advantage. The gain in knowledge from TV for these duller, heavy viewing children equalled four to five months of normal intellectual development. Preschool heavy viewers showed an advantage in vocabulary development of six months to one year over that of non-viewers.

Himmelweit's study also represented the first time program preferences of children were probed. He found preferences were affected by age, IQ, sex and emotional and intellectual maturity, but were not influenced by social level. Fifty percent of programs viewed by 10 year old children in this sample were classified as adult programs.

A total of 11 studies were conducted by Schramm in the U.S. and Canada over a 3-year period beginning in 1958. This represented one of the few times that viewing habits across all grade levels were surveyed. Schramm (1965) found children in early grades viewing approximately two hours per day, three to four hours per day

viewed by pupils in grades six and seven, with time gradually decreasing thereafter through the high school years. Schramm also found a connection between viewing time and IQ, age and sex. In early school years, the brighter children were the heavier viewers. At ages 10-13, however, children with higher IQs began to view less and those of lower IQ became the heavier viewers. Studies of vocabulary development in young children corroborated the findings of Himmelweit. Children who were heavy viewers in preschool years showed better vocabulary development upon entering school than light viewers. At a first grade level, Schramm found 40% of viewing time devoted to adult programs and by sixth grade, 79% of viewing time being devoted to adult programs.

Schramm, also able to compare viewing and non-viewing samples, found as Himmelweit had, that at the first introduction of television, reading time suffered. Himmelweit found a gradual return to pre-television levels, while Schramm found what appeared to be a permanent decrease in reading of comic books and pulp magazines as well as leisure time allotments for radio, movies and "time to do nothing in particular." Himmelweit, on the other hand, did find a permanent decrease in book reading for older boys and children of average intelligence. Schramm did not investigate the relationship

between televiewing and achievement. With the exception of a study done by Hornik (1969-70) in El Salvador, these were the last studies where it is possible to make comparisons between viewers and non-viewers.

Another noteworthy investigation of viewing habits was in progress at the time of Schramm and Himmelweit's studies. Witty began a series of studies in 1949 which continued each year through 1965. In these studies, data was gathered from more than 2,000 elementary school pupils and parents in the Chicago area through the use of questionnaires, interviews and logs. An average of 21 hours of viewing time per week was reported in 1949-50, dropping to 19 hours per week in 1951. Thereafter, 20 to 21 hours per week were reported year after year. Like Schramm, Witty also examined viewing habits across all grade levels. Viewing of first graders averaged 15 hours per week, reaching a peak of 25 hours per week at the fifth grade level. In agreement with Schramm's findings, Witty, too, found decreased viewing time for high school students to an average of 13 hours per week. Several times during his investigations, Witty ascertained the relationship of televiewing to reading achievement. Only a slight relationship was found except at the extremes. Comparison of students in the upper and lower fourths of their classes as measured by standardized educational tests, showed significant

differences in viewing times. The upper fourth of the class averaged 21 hours per week, while the lower fourth had a weekly viewing average of 26 hours. Program preferences were reported in very general terms for the group as a whole. Favorite programs were reported as variety shows, cartoons, comedies, adventure, mystery features, westerns and science fiction programs.

Witty's studies did not find a decrease in reading time as Himmelweit and Schramm had. His data indicated a slight increase in reading time, as of 1965, as compared to measures reported before television.

One additional study completes the studies of the 1950s. Sorelle and Walker (1962) studied the viewing habits of 2,000 junior high school students in the public schools of Amarillo, Texas in 1955 and again in 1958 when these same students were in high school. This study dealt only with viewing habits and did not consider their relationship to school achievement. Average viewing time per school day was found to be 2 hours 55 minutes in 1955 and 2 hours 25 minutes in 1958. The greatest difference between 1955 and 1958 was in weekend viewing time. In 1955, students surveyed spent approximately 8 hours 49 minutes in weekend viewing. This decreased to 5 hours 42 minutes when measured in 1958. Other habits measured showed little difference between 1955 and 1958.

Studies of the '60s

The 1960s brought some additional research, but none so comprehensive or extensive as that done in the '50s. Slater (1965) investigated the relationship between viewing time of third graders and their general school achievement, as well as intelligence, sex and socio-economic class. Mean viewing time for the sample of 500 students was 3.24 hours per day. A highly significant correlation was found between viewing time and socio-economic status. School achievement, reading, arithmetic achievement and intelligence all showed a negative correlation with television viewing time. Favorite programs were slap-stick comedies, adventure stories and news reports. Cartoons, films and westerns were also listed as popular. No difference in program preferences were reported between boys and girls.

Ridder (1963) reported results of her study done with 2,428 seventh and eighth grade students in public schools of Ontario, California. Mean viewing time for the 7 days of the study was 17.8 hours, with viewing time ranging from less than 2 hours to more than 50 hours. Subject grades for the pupils in the study were not representative of a normal bell shaped curve. Rather they were skewed in a positive direction, with only 1.6% receiving failing grades in English or Social Studies, and 2.4% failing in Math. No significant relationship

was found between academic achievement and the total number of hours spent viewing. Ridder expressed the opinion that students who neglect their school work to watch television would neglect it for some other reason if television were not available to them, corroborating an opinion expressed in an earlier study by Greenstein conducted in the Chicago area.

The only other study conducted in the 1960s was done by LaBlonde (1967). Her subjects were 294 fifth grade public school students from St. Paul, Minnesota. No clear relationship was found between scholastic achievement and televiewing habits, except in the area of work study skills where significant differences indicated a positive relationship between achievement and televiewing. Some noteworthy differences between boys and girls were revealed. For girls, the amount of time spent televiewing tended to vary inversely with both achievement and intelligence; while for boys, neither achievement nor intelligence was clearly related to viewing time. As in Slater and Scott's studies, LaBlonde also found an inverse relationship between televiewing time and socioeconomic status. This study represents the first time a consideration of program preferences in relation to achievement was made. Results showed that neither high achievers nor more intelligent children were more selective in their choice of programs.

Studies of the '70s

In an effort to parallel the study by Schramm, Lyle and Parker (1961), Lyle and Hoffman (1971) gathered data from first, sixth and tenth grade students. Their results revealed that compared to 10 years prior, children were spending more time watching television in 1970-71. The differences in viewing appeared less marked across comparisons of socioeconomic status and ability groups and were consistent with Schramm's 1959 findings. More intelligent students at the sixth grade level were the heaviest viewers. At the tenth grade level, brighter students spent less time viewing than their peers, however these differences were not as pronounced as they were in the 1959 studies. Consideration of viewing habits also showed that television viewing was usually accompanied by other activities, rather than being the focus of attention. Consistent with earlier findings by Schramm and Himmelweit, Lyle also found a decline in time devoted to viewing during adolescent years. Programs viewed by subjects were primarily for adult audiences. This also was consistent with earlier findings. The only study in the '70s comparing viewers with non-viewers was researched by Hornik (1978), in El Salvador, over the years 1969-1972. Television ownership is far from universal in El Salvador, due to its relatively poor economic status. In this study, Hornik approached the problem of television

and achievement from a different perspective. Instead of examining achievement scores at a particular point of time, he examined growth or change in scores for reading skills and general ability over a two to three year period. Three separate samples or cohorts of students were followed from the time they entered seventh grade until they graduated from ninth grade, or in the case of one sample, from eighth grade. Analysis of school achievement on a short-term yearly basis failed to reveal any consistent relationship to television access, or more specifically, the recent acquisition of a television. However, there were consistent negative correlations to growth in reading skills for all three cohorts and a significant negative correlation with general ability for one.

Childers and Ross (1973) investigated the relationship between time spent viewing and intelligence (IQ), grade point average (GPA) and achievement on the Iowa Tests of Basic Skills (ITBS). The range of viewing time for the 100 middle elementary pupils in this study was from .25 hours to over 6 hours per day, with a daily mean of 3.31 hours. Using viewing time and grade point average as dependent variables, a multiple regression analysis revealed a non-significant relationship between viewing time and grades. Although the difference was not statistically significant, the difference that did exist

was on the negative side. Hours of viewing time were correlated with GPA, IQ and achievement test scores. Grade point average was also correlated with IQ, achievement test scores and hours of viewing, each taken independently. In all cases, any correlation between viewing time and any of the other variables taken separately or together was negative. Childers also examined the data for any relationships between type of programs viewed and GPA, IQ, ITBS or viewing time. No trends were revealed, however.

Starkey and Swinford (1974) conducted one of the first studies dealing specifically with television viewing and reading achievement. Two hundred and twenty-six fifth and sixth graders from an elementary school in a mid-western suburban city were the subjects of this study. Average viewing time was reported as 29 hours per week, with girls watching slightly less and boys slightly more. Better readers, those on a high school level, averaged 26 1/2 hours of viewing time per week, while poorer readers (on a third and fourth grade level) averaged 34 hours of viewing time per week. Starkey and Swinford thus conclude a slight but distinct relationship between reading abilities and amount of viewing time.

An attitude survey was implemented by Phelan and Starkey (1975). While not dealing formally with the relationship between viewing and reading achievement, it

does provide information about students' attitudes and perception of TV viewing and reading abilities. Using a questionnaire, Phelan and Starkey obtained data on 124 fifth grade children. Three hours daily was revealed as the average viewing time, with girls watching less than the boys. Programs were chosen mainly for their entertainment value. Television was generally preferred over reading as a leisure time activity. Sixty-three percent of the subjects of this study reported usually receiving a good reading evaluation on their report cards. On the basis of this meager data, the authors conclude that television viewing has only a minimal effect on school work in general and in reading specifically. This hardly seems to be a valid conclusion based on the data as presented.

Four hundred twenty-two students from grades three through eight in Vermillion, South Dakota, served as subjects for a study conducted by Wood and Eicher (1976). Data was collected regarding television viewing habits, but no attempt was made to correlate viewing habits with school achievement. Analysis of the results revealed that the sample group averaged two television sets per household. A majority of the students did not have a television in their own room. Students watched television primarily for entertainment purposes, consistent with the findings of Phelan and Starkey. At the time of this

study, the program "Starsky and Hutch" received the highest mean rank of the favorite television programs.

The studies of Phelan and Starkey and Wood and Eicher represented the first studies aimed at assessing the attitudes of children toward television viewing.

Perney (1976) studied the relationship between television viewing and early school achievement. The quantitative and verbal test scores of 202 kindergarten children were correlated with parental responses to a questionnaire concerning the television viewing habits of their children. A negative correlation was found between time spent watching comedy-variety-drama shows and verbal and quantitative ability for girls. This was one of the only studies done up until this time which attempted to correlate the type of programs being viewed with ability. The correlation between the viewing of "Electric Company" and quantitative ability was positive. Analysis of the relationship between girls' verbal ability and parents' use of television as a reward or punishment showed a negative correlation. When parents consciously used television as a teaching device, the correlation between television viewing and girls' verbal ability was positive. The final analysis of total viewing time revealed a negative correlation to quantitative scores, but a positive correlation to verbal scores.

A large sample of students from grades four through nine in Sedgewick County, Kansas, were the subjects of a study done by Mohr (1976). Sponsored by the American Broadcasting Co. in New York, Mohr studied viewing habits, program preferences and parental guidance of 5,167 children and 4,882 of the children's parents. Data collected through questionnaires revealed that these children spent approximately 3 1/2 hours per day viewing television. On nights before school, 70% and 90% of children and parents respectively, reported that viewing must cease at or before 10:00 p.m. No parental limitations were reported by 60% and 70% of children and parents respectively on viewing before non-school days. Parents and children frequently differed in program preferences. The relationship between viewing time and school or reading achievement was not investigated.

The relationship between television viewing and achievement at the intermediate grade level was investigated by Quisenberry and Klasak (1976). Viewing time was reported separately for fourth, fifth and sixth grades. All students averaged slightly more than four hours per day. No significant relationship was found between television viewing and achievement with the authors concluding that while results do not support the premise that television is detrimental to achievement, neither do they support the opinion that it assists children

in school.

One of the only studies purporting to investigate the correlation between viewing time, the type of programs watched and reading achievement was conducted by List (1978) as a masters thesis at Kean College. Unfortunately, the study is of very little value. Results are based on only 20 questionnaires, and yet the author attempts to conclude a negative correlation between reading and television. Content of programs is practically ignored in the final analysis, except to say that the overall favorite of both groups was cartoons.

The most recent study found was done by Lehrer (1978). Lehrer surveyed 105 sixth, seventh and eighth grade students to determine the extent of their television viewing. Viewing time, program preferences, and reasons for watching television were analyzed. Results showed sixth graders watched more television than seventh or eighth graders, with sixth grade females watching more than sixth grade males. Time spent watching television was greatest on Saturday, when compared to all other days of the week. When program preferences were analyzed, situation comedies were reported as the programs most often viewed. These were closely followed by program categories including adventure, cartoon/fantasy, and game shows. Reasons reported for watching television varied by grade and sex, with the author concluding that they

did not indicate a maturing pattern of program selection. No attempt is made to correlate any aspect of viewing with school or reading achievement.

Conclusion

Research regarding the effects of television viewing on reading and school achievement began almost with the advent of television, itself. The most extensive research concerned with TV and achievement was conducted in the mid-'50s and early '60s. Since that time, the small amount of existing research has been primarily concerned with children's attitudes and perceptions of television. Few studies have dealt with academic achievement, and fewer still specifically with reading.

In general, existing literature, is inconsistent in quality, with incomplete and conflicting results and conclusions reported. With only a very few exceptions, most of the researchers have reported either no effects linked to television viewing or non-significant differences with negative tendencies. The value of many of these studies is limited, however, by inherent weaknesses. Small sample groups in some studies make their validity and reliability questionable. Greenstein (1954), Childers and Ross (1973), List (1978) and Lehrer (1978) all use sample groups of less than 100 subjects. In several studies, socioeconomic biases are evident. Greenstein's (1954) conclusions were based on a sample of children

from a predominantly lower middle income community. In the matching procedure used by Himmelweit, "more controls (non-viewers) came from exceptionally poor homes, or homes where the child had to help a lot, or from broken homes or orphanages." The El Salvador sample used by Hornik represents a population with socioeconomic characteristics markedly different from those encountered in the U.S. The purchase of a television set in El Salvador is a substantial investment relative to per capita income, with cost equivalent to a year of mean income. Generalizability of these results is, therefore, limited.

Restraints on generalizability are also apparent due to the narrow age/grade focus of the majority of the studies. Schramm (1965), Witty (1967), Lyle and Hoffman (1971), Wood and Mohr (1976) are the only studies spanning multiple grade levels.

Only three studies can be classified as quasi-experimental in nature: Greenstein (1954), Himmelweit (1958), and Schramm (1965). All were done in the '50s and are probably the best known in the field.

Inconsistencies in results can also be partly attributed to the widely varying procedures used to gather data. Some studies such as Greenstein's, Sorelle and Childers and Ross, relied on the data collected from a questionnaire administered on one particular day, with

Greenstein's questionnaire asking about information on viewing habits over the previous three years. In Ridder's (1963) study, subjects kept a record of programs viewed in a folder for one week, in addition to filling out a questionnaire. Checklists were used for two distinct one-week periods in the study by Scott (1956). Records or logs were completed in classrooms in the studies conducted by Ridder (1963) and LaBlonde (1967). On the other hand, Perney and List relied on questionnaires and logs returned on a strictly voluntary basis with resulting severely limited response. Some researchers included information provided by parents in addition to that provided by their children. Perney (1976) and Mohr (1976) are examples of two such studies.

Measurement of achievement also varies between studies. Measurement ranges from the use of grade point average in Greenstein's (1954) and Childers and Ross' (1973) study to the use of standardized achievement scores in studies by Slater (1965), Quisenberry and Hornik (1976). Standardized tests tend to be normed over a large population, whereas grade point averages tend to be affected by the varying standards of individual teachers and school systems.

Lack of replication of both procedures and age/grade levels severely limits the conclusions and generalizations which can be drawn from the research.

Failure to consider contributing variables, particularly socioeconomic level and intelligence further limits the validity and reliability of the results. For example, Witty (1967) reported that high achievers tended to view less frequently than low achievers. No analysis of other differences between high and low achievers was attempted. Scott (1956) reported a negative correlation between viewing and both socioeconomic level and IQ. LaBlonde (1966) found an inverse relationship between televiewing and achievement in girls, as well as IQ and socioeconomic level. Similarly, Himmelweit (1958), Ridder (1963), and Clark (1951) also report non-significant correlations between viewing and achievement. While information regarding IQ or socioeconomic level may be included in data collected, these variables are not used as controls in any of these studies. It is possible that a non-significant correlation between viewing and achievement could become a significant correlation if a control for IQ or socioeconomic level were introduced.

The primary concern of research to date has been with volume of viewing time. Some research has attempted to correlate the varying numbers of hours spent viewing with school or reading achievement, while others surveyed viewing habits alone. In almost all cases, however, the emphasis was on number of hours spent viewing television.

Program preferences were reported usually for the sample group as a whole. In studies where analysis proceeded any further, preferences were looked at usually in terms of age and/or sex. Only one study reviewed in the literature, attempted to identify any relationship between type of programs watched and reading achievement. This was the study conducted by List (1978) with second grade children. Results, however, are based on a sample of only 20 children with no consideration made for any other variables. Any conclusion drawn by this study are questionable, at best.

The following study is an attempt to determine the relationship between the quality of television viewing time and reading achievement as well as other selected variables.

CHAPTER III

PROCEDURE

Subjects

The 123 subjects for this study were 59 seventh and 64 eighth grade students attending the High Bridge Middle School in High Bridge, New Jersey. High Bridge is located in rural Hunterdon County, with a total population of approximately 2,606. Median income of households in the town is \$15,480. Population is almost 100% Caucasian. Median schooling of residents is 12.1 grades. Fifty-two percent complete four years of high school. Seventy-seven and two-tenths percent of residents are natives of New Jersey.

Testing Materials

The Stanford Diagnostic Reading Test (SDRT) is comprised of five subtests: Auditory Vocabulary, Reading Comprehension, Phonetic Analysis, Structural Analysis and Reading Rate. For the purposes of this study, only the Reading Comprehension (Brown Level) portion of the test was utilized.

The Reading Comprehension portion of the SDRT contains a total of 60 items--30 testing literal comprehension

and 30 testing inferential. Comprehension is assessed by means of short reading passages followed by questions. The Brown Level contains passages at a readability level appropriate for pupils in grades 5 through 8 according to the Dale-Chall Readability formula, as reported in the SDRT technical manual.

Reliability coefficients for the test, reported in the technical manual were computed using the Kuder-Richardson formula 20. They are reported for each grade level separately. At the seventh grade level, a coefficient of .95 is reported for the Comprehension section as a whole with the coefficient for literal comprehension at .91 and inferential at .89. At the eighth grade level the coefficient for comprehension is .94, with literal at .90 and inferential at .89.

The Otis-Lennon Mental Ability Test - Intermediate level was used to assess intelligence. According to the authors of this test, it has been designed to provide "comprehensive assessment of the general mental ability or scholastic aptitude of the student" (Manual for Administration, p. 4). The test, comprised of 80 items, is designed to measure the pupil's facility in abstract reasoning with verbal, symbolic and figural test content. The test yields a single total score summarizing the student's performance.

Reliability coefficients for the Otis-Lennon Mental Ability Test were determined on the basis of corrected split-half correlations and the Kuder-Richardson and alternate forms procedures. Coefficients for grade seven are reported as follows: .95 for Split Half, .95 for Kuder-Richardson formula 20, and .91 for alternate forms. For grade eight coefficients are .95 for Split-Half, .95 for Kuder-Richardson formula 20, and .94 for alternate forms.

Procedure

A total of six seventh and eighth grade classes were used in this study--three seventh grades and three eighth grades. All classes were taught one 45-minute period per day by the author of this study.

Each class was told that the investigator wanted to learn more about the television viewing habits and recreational reading habits of seventh and eighth grade students. Students were assured that the information obtained would not in any way affect their grade in that subject, and therefore were encouraged to be honest.

At the request of the administration, information regarding parental occupations was obtained through a general "Reading Questionnaire." This questionnaire asked for information regarding general recreational reading habits and included a question asking for occupations of students' parent(s) or guardians. In assigning

an SES index number from the Reiss scale in cases where both parents were employed, the higher of two index numbers was utilized.

In order to log TV viewing for a one-week period of time, each student was given a TV guide entitled "Today in Hunterdon." An additional mimeographed form was provided to cover programs aired in before-school and after-school hours, since these programs were not included in the daily listings. Class time was provided on a daily basis for one week to allow for logging of programs viewed on the previous day. Beginning on a Tuesday, students were instructed to turn to the previous day's program listing and circle all those programs watched and to use the additional form to check off any programs seen which were not included in the listing. This procedure was repeated on Wednesday, Thursday, and Friday. On the following Monday, students completed logs for their weekend viewing. TV guides were collected at the end of each class and handed back the following day.

To investigate the relationship between intelligence and TV viewing, the Otis-Lennon Mental Ability Test, Intermediate level, Form J was administered to all subjects. This was accomplished within a one-class period. Total administration time for this test was approximately 50 minutes, with 40 minutes of actual testing time. Tests were hand-scored using the stencil key designed

for use with IBM 805 answer sheets.

Information on the reading ability of each student was obtained through the administration of the Reading Comprehension portion of the Stanford Diagnostic Reading Test.

In order to assess the quality of TV viewing time for each student, the investigator assigned each program category a quality index number from 1 to 4, with 1 representing low quality and 4, high quality. Assignment of the quality index number was accomplished through analyzing each program category for the amount of "mental involvement" necessary for comprehension. A parallel can be drawn to the three levels of comprehension: concrete, inferential and application. A documentary or news program requires more mental effort or thinking activity on the part of the viewer than a cartoon or situation comedy.

Using this rationale, quality index numbers were assigned as follows:

Low Quality	1	Music/Variety
	1	Cartoon/Fantasy
	1	Situation Comedy
	2	Game Shows
	2	Sports
	2	Adventure
	3	Movies

	3	Drama
	3	Talk Shows
High Quality	4	Educational Programs
	4	Documentary
	4	News

To attain an overall quality of viewing rating for each student, the following procedure was used. The hours of viewing time for each category were multiplied by the quality index number. The sum was then divided by the total viewing time for the week. The resulting figure represented the average quality of the student's viewing.

Treatment of the Data

The obtained data was coded and transferred to Fortran coding sheets. The data on each of the 123 subjects was punched on IBM cards and submitted to computer processing at the Center for Computer and Information Services Department at Rutgers University.

The Biomed Computer program was used to analyze the data. This program provides means, standard deviations, and Pearson product moment correlation coefficients for each of the variables. Analysis for significant differences between grade levels and sexes was also provided through t tests.

CHAPTER IV

RESULTS OF THE STUDY

Table 1 contains a summary of the mean and standard deviation for each variable examined in this study. Mean age for the subjects in this study was 162.96 months or 13.55 years. The mean raw score obtained on the Stanford Diagnostic Reading Test was 50.89. Grade equivalent for a raw score of 50 is 7.8 and for 51 is 8.0. The mean SES as measured by the Reiss scale was 54.98 with a SD of 23.273 indicating a wide range of socioeconomic levels of parents of students in the study.

TABLE 1
MEANS AND STANDARD DEVIATIONS
OF SELECTED VARIABLES

Variable	Mean	SD
SDRT	50.89	8.93
Age	13.55 yrs.	8.07
DIQ	104.85	11.81
SES	54.98	23.27
Quality	1.82	.37

Question 1: Viewing Time

Table 2 contains mean viewing time and standard deviations. The mean weekly viewing time for the students in this study was 17.45 hours. Students in this study spent most of their viewing time watching Situation Comedies with a mean of 6.18 hours per week. The next most watched category was Drama, with a mean viewing time of 2.01 hours per week. The remaining viewing time in decreasing order were Movies with 1.85 hours, Adventure 1.78 hours, Cartoon/Fantasy 1.55 hours, Music 1.36 hours, Sports 1.13 hours, News .76 hours, Game Shows .37 hours, Talk Shows .35 hours, Educational Programs .08 hours, and the least watched category was Documentaries with .04 hours per week.

The conversion of these viewing times to percentages of the total viewing time is also included in Table 2.

Question 2: Quality of Television Viewing Time

The overall quality of viewing time for the subjects of this study was 1.82 with a Standard Deviation of .37.

Question 3: Relationship Between Sex and Quality of Viewing Time

Table 3 contains a summary of the comparison of boys and girls on the variables examined in this study.

A t test was computed for each variable to determine whether the differences in the scores obtained for boys

TABLE 2
MEANS AND STANDARD DEVIATIONS OF HOURS OF VIEWING
IN SELECTED PROGRAM CATEGORIES

Program Category	Mean Hours	SD	Mean % ^a	SD
Situation Comedy	6.18	5.22	34.26	19.04
Drama	2.01	1.96	11.46	10.39
Movies	1.85	2.25	10.60	12.59
Adventure	1.78	1.77	11.01	11.77
Cartoon/ Fantasy	1.55	2.13	7.35	9.39
Music/Variety	1.36	1.38	9.69	13.24
Sports	1.13	1.98	7.39	13.48
News	.76	1.65	3.82	7.56
Games	.37	.81	2.02	3.92
Talk	.35	.99	1.69	4.71
Educational	.08	.25	.45	1.45
Documentaries	.04	.20	.25	1.24
Total Hours	17.45	10.58		

^aCategory percentages were calculated on an individual basis prior to determining a mean percentage for each program category.

TABLE 3

COMPARISON OF READING ACHIEVEMENT, QUALITY OF VIEWING TIME
AND SELECTED VARIABLES FOR BOYS AND GIRLS
IN THE SEVENTH AND EIGHTH GRADE

Variable	Sex	N	Mean	SD	<u>t</u>
SDRT	M (1)	63	42.29	9.92	-2.08 ^a
	F (2)	60	52.57	7.48	
DIQ	M	63	102.90	10.50	-1.89
	F	60	106.88	12.82	
SES	M	63	58.02	22.88	1.49
	F	60	51.80	23.44	
<u>Actual Viewing Times:</u>					
Adventure	M	63	1.78	1.74	0.01
	F	60	1.78	1.82	
Cartoon/Fantasy	M	63	1.47	1.87	-0.45
	F	60	1.64	2.38	
Documentary	M	63	0.03	0.18	-0.51
	F	60	0.05	0.22	
Drama	M	63	1.90	2.04	-0.62
	F	60	2.13	1.88	

41

TABLE 3--Continued

Variable	Sex	N	Mean	SD	<u>t</u>
Educational	M	63	0.10	0.28	0.63
	F	60	0.07	0.22	
Game	M	63	0.25	0.47	-1.73
	F	60	0.50	1.04	
Movies	M	63	2.03	1.90	0.93
	F	60	1.65	2.57	
News	M	63	1.09	2.04	2.30 ^a
	F	60	0.43	1.00	
Situation Comedies	M	63	5.85	5.18	-0.71
	F	60	6.52	5.28	
Sports	M	63	1.67	2.46	3.30 ^b
	F	60	0.56	1.04	
Talk	M	63	0.33	1.02	-0.23
	F	60	0.37	0.98	
Music Variety	M	63	1.07	1.33	-2.40 ^a
	F	60	1.66	1.38	
Total Hours	M	63	17.56	10.48	0.12
	F	60	17.33	10.76	
Quality	M	63	1.90	.34	-2.73 ^b
	F	60	1.72	.38	

TABLE 3--Continued

Variable	Sex	N	Mean	SD	t
<u>Percentage of Viewing Time:</u>					
Adventure	M	62	11.80	12.39	0.76
	F	59	10.18	11.11	
Cartoon/Fantasy	M	62	7.57	10.21	0.26
	F	59	7.13	8.52	
Documentary	M	62	0.19	1.09	-0.54
	F	59	0.31	1.40	
Drama	M	62	9.96	9.83	-1.64
	F	59	13.03	10.80	
Educational	M	62	0.63	1.80	1.40
	F	59	0.27	0.93	
Game	M	62	1.63	3.46	-1.13
	F	59	2.43	4.34	
Movies	M	62	12.38	12.59	1.60
	F	59	8.73	12.43	
News	M	62	5.22	8.74	2.15 ^a
	F	59	2.34	5.80	

TABLE 3--Continued

Variable	Sex	N	Mean	SD	<u>t</u>
Situation Comedies	M	62	31.60	18.82	-1.59
	F	59	37.06	19.02	
Sports	M	62	11.14	16.68	3.32 ^b
	F	59	3.44	7.23	
Talk	M	62	1.43	4.15	-0.63
	F	59	1.97	5.25	
Music Variety	M	62	6.45	8.94	-2.81 ^b
	F	59	13.10	15.98	

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

and girls were statistically significant. Results will be discussed in their order of significance.

For boys the mean percentage of weekly viewing time spent viewing Sports programs was 11.14% with a SD of 16.68. The mean score for girls was 3.44% with a standard deviation of 7.23. The t value obtained in comparing the two groups was 3.32 which was statistically significant at the .05 level of confidence.

A comparison between boys and girls on the actual viewing time of sports programs was also statistically significant. The mean viewing time for boys was 1.67 hours, while it was .56 hours for girls. The obtained t value was 3.30.

A study of the mean percentage of weekly viewing time spent watching music/variety programs also showed a significant difference between boys and girls. In this case, however, the girls had the higher mean of 13.10%, compared with the boys' 6.45%. The obtained t value was -2.81.

Actual viewing time of music/variety programs also showed a significant difference between boys and girls. Girls watched a mean of 1.66 hours per week, while boys viewed a mean of 1.07 hours weekly.

An analysis of the quality of students' viewing time, showed a statistically significant difference between the boys and girls in this study. The mean quality of viewing

time for girls was 1.72, while the boys was 1.90. The t value of -2.73 indicates a significant difference, with boys viewing programs of higher quality than girls.

A comparison of boys and girls in the amount of time spent watching news revealed a mean of 1.09 hours per week for boys and .43 hours per week for girls. The obtained t value of 2.30 indicates a statistically significant difference between amount of time spent watching news programs by the boys and girls in this study.

As expected, the percentage of total viewing time for news also showed a statistically significant difference between boys and girls. Boys obtained a mean of 5.22% of total weekly time spent watching news. The mean for girls was 2.34% of total viewing time. The obtained t value of 2.15 was statistically significant at the .05 level of confidence.

Mean scores on the Stanford Diagnostic Reading Test for boys and girls also revealed statistically significant results. The mean score for girls was 52.57 with a SD of 7.48 and for boys was 49.29 with a SD of 9.92. The obtained t value of -2.08 reveals statistical significance at the .05 level.

After computing t tests for each of the remaining variables examined in the study, it was revealed that no significant differences existed between the boys and girls on any other variables.

Question 4: Relationship Between Grade Level
and Quality of Viewing Time

Table 4 contains a summary of the comparison of seventh and eighth graders on the variables examined in this study.

A t test was computed for each variable to determine whether the differences in the scores obtained for seventh and eighth graders were statistically significant. Results will be presented in their order of significance.

Seventh grade students in this study obtained a mean raw score on the SDRT of 48.39 with a SD of 10.58, while eighth graders obtained a mean raw score of 53.19, with a SD of 6.35. The obtained t of -3.02, is statistically significant at the .01 level.

An analysis of the percentages of the total viewing time devoted to Cartoon/Fantasy programs revealed significant differences between seventh and eighth grade students. Seventh graders spend a mean of 9.81% of their total viewing time watching programs in the Cartoon/Fantasy category, with a SD of 11.07, while eighth graders spent a mean of 5.17% of their total viewing time on Cartoon/Fantasy with a SD of 6.98. The obtained t of 2.72 was statistically significant at the .01 level.

A comparison of the actual viewing time in the Cartoon/Fantasy category did not reveal a significant difference between seventh and eighth graders.

TABLE 4
COMPARISON OF READING ACHIEVEMENT, QUALITY OF VIEWING TIME
AND SELECTED VARIABLES FOR SEVENTH
AND EIGHTH GRADERS

Variable	Grade	N	Mean	SD	t
SDRT	7	59	48.39	10.58	-3.02 ^b
	8	64	53.19	6.35	
DIQ	7	59	104.08	13.26	-.68
	8	64	105.55	10.35	
SES	7	59	49.49	25.06	-2.57 ^b
	8	64	60.05	20.40	
<u>Actual Viewing Times:</u>					
Adventure	7	59	1.73	1.64	-0.29
	8	64	1.82	1.90	
Cartoon/Fantasy	7	59	1.89	2.32	1.70
	8	64	1.24	1.89	
Documentary	7	59	0.05	.22	0.55
	8	64	0.03	.18	
Drama	7	59	1.91	2.07	-0.57
	8	64	2.11	1.86	

48

TABLE 4--Continued

Variable	Grade	N	Mean	SD	<u>t</u>
Educational	7	59	0.08	.21	0.15
	8	64	0.08	.29	
Game	7	59	0.54	1.09	2.24 ^a
	8	64	0.21	0.33	
Movies	7	59	1.67	2.53	-0.82
	8	64	2.01	1.96	
News	7	59	0.74	1.48	-0.17
	8	64	0.79	1.80	
Situation Comedy	7	59	5.64	4.42	-1.10
	8	64	6.66	5.85	
Sports	7	59	0.83	1.33	-1.66
	8	64	1.41	2.41	
Talk	7	59	0.36	1.07	0.11
	8	64	0.34	0.93	
Music	7	59	1.23	1.48	-0.99
	8	64	1.48	1.28	
Total Hours	7	59	16.67	10.28	-0.79
	8	64	18.17	10.87	
Quality	7	57	3.21	0.41	0.58
	8	64	3.17	0.33	

TABLE 4--Continued

Variable	Grade	N	Mean	SD	t
<u>Percentage of Viewing Time of:</u>					
Adventure	7	57	11.43	12.11	0.37
	8	64	10.64	11.53	
Cartoon/Fantasy	7	57	9.81	11.07	2.72 ^b
	8	64	5.17	6.98	
Documentary	7	57	0.32	1.39	0.54
	8	64	0.19	1.11	
Drama	7	57	11.28	11.02	-0.18
	8	64	11.62	9.87	
Educational	7	57	0.59	1.71	0.93
	8	64	0.34	1.17	
Game	7	57	2.48	4.44	1.18
	8	64	1.62	3.37	
Movies	7	57	9.47	13.68	-0.93
	8	64	11.61	11.55	
News	7	57	3.87	7.35	0.07
	8	64	3.77	7.80	

TABLE 4--Continued

Variable	Grade	N	Mean	SD	<u>t</u>
Situation Comedies	7	57	34.31	20.65	0.02
	8	64	34.23	17.64	
Sports	7	57	6.19	12.87	-0.92
	8	64	8.45	14.01	
Talk	7	57	1.75	5.22	0.11
	8	64	1.65	4.25	
Music/Variety	7	57	8.53	14.70	-0.91
	8	64	10.73	11.81	

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

An obtained t value of -2.57 revealed a statistically significant difference between seventh and eighth graders on the socioeconomic level of their parents. The mean SES level for parents of seventh graders was 79.49 with a SD of 25.06, while the mean for eighth grade parents was 60.05 with a SD of 20.40. Thus parents of eighth graders in this study generally come from a lower socioeconomic level than those of seventh graders. The obtained t value of -2.57 is statistically significant at the .01 level.

Data revealed that seventh graders watch a mean of .54 hours of game shows per week, while eighth graders watch .21 hours per week, statistically significant at the .05 level. Standard deviations for seventh and eighth grade means respectively were 1.09 and .33. The obtained t value was 2.24.

No significant differences between seventh and eighth graders were revealed by obtained t values for the remaining variables examined in this study.

As a result of these significant differences further correlations were computed separately for each grade and sex. In only a few cases, did statistically significant differences appear. Further analysis of these statistically significant correlations revealed that only a very small percentage of the variance between the variables was being accounted for in each case, and that educationally

these differences were not significant. It was, therefore, decided, for the purposes of the narrative, to further analyze the data in terms of the entire group since a larger N is more stable.

Question 5: Relationship Between Total Weekly Viewing Time and the Independent Variables

A summary of the correlations between Sex, Grade, Age, IQ, SES, SDRT, and Total Viewing hours for the seventh and eighth graders in this study is given in Table 5.

Total Viewing Time correlated .09 with SES, .08 with age, .07 with grade, -.05 with SDRT, -.02 with IQ, and -.01 with sex. None of these correlations proved to be significant.

Since the relationships of the other variables with one another are secondary in nature to this study, only significant relationships will be discussed.

Sex correlated .17 with IQ and .18 with SDRT, both significant at the .05 level of confidence. Grade correlated .73 with age, .23 with SES, and .27 with SDRT, all significant at the .01 level of confidence. Age correlated .22 with DIQ. DIQ correlated .34 with SES and .69 with SDRT. SES correlated .31 with SDRT, all significant at the .01 level of confidence.

The remaining correlations were not significant.

TABLE 5
INTERCORRELATIONS BETWEEN TOTAL HOURS OF VIEWING TIME AND SELECTED
VARIABLES FOR SEVENTH AND EIGHTH GRADERS

	Sex	Grade	Age	DIQ	SES	SDRT	Hours
Sex		-0.01	-0.07	0.17 ^a	-0.13	0.18 ^a	-0.01
Grade			0.73 ^b	0.06	0.23 ^b	0.27 ^b	0.07
Age				-0.22 ^b	0.01	-0.01	0.08
DIQ					0.34 ^b	0.69 ^b	-0.02
SES						0.31 ^b	0.09
SDRT							-0.05
Hours							

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

Question 6: Relationship Between Program
Category Viewing Times and the
Independent Variables

Table 6 contains a summary of the correlations between reading achievement (SDRT) as well as other variables and viewing time and percentage of viewing time in each program category. Reading achievement correlated, from highest to lowest, .23 with Music/Variety viewing, significant at the .01 level of confidence, -.20 with percentage of Cartoon/Fantasy viewing, -.20 with percentage of Situation Comedy viewing, and .19 with percentage of Music/Variety viewing, significant at .05 level of confidence.

The remaining correlations between reading level and the program categories were not significant.

Since the correlation between the other variables examined in the study and the program categories are secondary to this study, only significant correlations will be discussed here.

Sex correlated -.29 with percentage of Sports viewing, -.28 with hours of Sports viewing, .25 with percentage of Music/Variety viewing, .21 with hours of Music/Variety viewing, all significant at the .01 level of confidence. Sex correlated -.20 with hours of News viewing, -.19 with percentage of News viewing, and .16 with Game Show viewing, all significant at the .05 level.

TABLE 6
CORRELATIONS BETWEEN PROGRAM CATEGORY VIEWING TIMES AND SELECTED
VARIABLES FOR SEVENTH AND EIGHTH GRADERS

	Adventure	Cartoon/Fantasy	Documentary	Drama	Educational	Game
<u>Actual Viewing Times:</u>						
Sex	-0.00	0.04	0.05	0.06	-0.06	0.16 ^a
Grade	0.03	-0.15 ^a	-0.05	0.05	-0.01	-0.21 ^b
Age	0.15	-0.10	-0.01	0.18 ^a	0.00	-0.24 ^b
DIQ	0.01	-0.04	0.07	-0.20 ^a	0.07	0.19 ^a
SES	0.17 ^a	-0.03	0.06	-0.04	0.09	-0.08
SDRT	-0.05	-0.14	0.10	-0.06	0.00	0.06

TABLE 6--Continued

	Movies	News	Situation Comedies	Sports	Talk	Music/Variety
<u>Actual Viewing Times:</u>						
Sex	-0.09	-0.20 ^a	0.06	-0.28 ^b	0.02	0.21 ^b
Grade	0.08	0.02	0.10	0.15	-0.01	0.09
Age	0.04	0.01	0.08	0.02	-0.06	0.04
DIQ	0.04	-0.02	-0.07	0.06	-0.05	0.24 ^b
SES	-0.10	-0.00	0.09	0.17 ^a	0.12	0.06
SDRT	0.02	0.01	-0.10	0.07	-0.08	0.23 ^b

TABLE 6--Continued

	Adventure	Cartoon/Fantasy	Documentary	Drama	Educational	Game
<u>Percentage</u> <u>of Viewing</u> <u>of:</u>						
Sex	-0.07	-0.02	0.05	0.15	-0.13	0.10
Grade	-0.03	-0.25 ^b	-0.05	0.02	-0.09	-0.11
Age	0.03	-0.18 ^a	-0.02	0.18 ^a	-0.07	-0.12
DIQ	0.09	-0.06	0.08	-0.16 ^a	0.01	0.10
SES	0.21 ^a	-0.19	0.07	-0.04	0.00	-0.12
SDRT	0.06	-0.20 ^a	0.10	0.00	-0.00	0.00

TABLE 6--Continued

	Movies	News	Situation Comedies	Sports	Talk	Music/Variety
<u>Percentage of Viewing of:</u>						
Sex	-0.15	-0.19 ^a	0.14	-0.29 ^b	0.06	0.25 ^b
Grade	0.09	-0.01	-0.00	0.08	-0.01	0.08
Age	0.02	0.02	-0.00	-0.02	-0.05	0.03
DIQ	0.07	-0.04	-0.14	0.04	-0.03	0.19 ^a
SES	-0.12	-0.03	-0.08	0.09	0.12	0.06
SDRT	0.08	0.08	-0.20 ^a	0.07	-0.03	0.19 ^a

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

Grade correlated $-.25$ with percentage of Cartoon/Fantasy viewing, significant at the $.01$ level of confidence. It also correlated $-.21$ with hours of Cartoon/Fantasy viewing. No other correlations were significant.

Age correlated $-.24$ with Game Show viewing, significant at the $.01$ level. Age also correlated significantly, $.18$, with Drama viewing, $.18$ with percentage of Drama viewing and $-.18$ with percentage of Cartoon/Fantasy viewing.

DIQ correlated $.24$ with Music/Variety viewing, significant at the $.01$ level. DIQ also correlated $-.20$ with hours of Drama viewing, $.19$ with hours of Game Show viewing, $.19$ with percentage of Music/Variety viewing and $-.16$ with percentage of Drama viewing, all significant at the $.05$ level. All other correlations failed to reach the $.05$ level of significance.

SES correlated $.21$ with percentages of Adventure viewing, $.17$ with hours of Adventure viewing, and $.17$ with hours of Sports viewing, all significant at the $.05$ level of confidence.

Question 7: Relationship Between Quality
of Viewing Time and the
Independent Variables

A summary of the correlations between quality of viewing time and the independent variables of sex, grade, age, DIQ, SES, SDRT, and total hours of viewing time are presented in Table 7.

TABLE 7
CORRELATIONS BETWEEN QUALITY OF TELEVISION VIEWING
TIME AND SELECTED VARIABLES FOR SEVENTH
AND EIGHTH GRADERS

	Quality
Sex	-.24 ^b
Grade	.05
Age	.09
DIQ	-.01
SES	.00
SDRT	.15 ^a
Hours	.03

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

Two correlations proved to be statistically significant. Sex correlated $-.24$ with quality of viewing time, significant at the $.01$ level of confidence. Reading level as measured by the SDRT correlated $+.15$ with quality of viewing time, significant at the $.05$ level of confidence.

The remaining correlations did not prove statistically significant. Quality of viewing time correlated $+.09$ with age, $+.05$ with grade, $+.03$ with total viewing hours, and $-.01$ with DIQ.

Question 8: Relationship Between Reading
Achievement and Selected Variables
in a Stepwise Multiple Regression

Results of a stepwise multiple regression, in which reading level was held as a dependent variable and DIQ, SEX, Sex and Percentage of viewing time in each category are introduced as independent variables, are presented in Table 8. The cumulative R^2 for DIQ was $.48$, for Grade $.05$ and for quality of viewing time $.02$. The stepwise multiple regression was discontinued after three variables since beyond this no additional variance was accounted for.

TABLE 8
MULTIPLE REGRESSION

Variable	Simple r	Dependent Variable: RSQ Change	SDRT Cumulative Multiple r	B	Beta
DIQ	.69	.48	.69	.47	.62
Grade	.28	.05	.73	3.52	.20
Quality	.15	.02	.74	4.07	.17

CHAPTER V

SUMMARY, DISCUSSION AND CONCLUSIONS

Summary

The purpose of this chapter will be to discuss the results of the study and to offer possible explanations for the results while attempting to relate the explanations to the literature. The questions addressed in this study were:

1. What is the mean viewing time for the subjects of this study? What is the mean viewing time in each program category? What types of programs are most frequently viewed by students in this study?
2. What is the overall quality of students' viewing for the subjects of this study?
3. Are there differences between boys and girls in the quality of TV viewing time and other selected variables?
4. Are there differences between seventh and eighth graders in the quality of TV viewing time and other selected variables?

5. What is the nature of the relationship between total weekly viewing time and the independent variables studied?
6. What is the nature of the relationship between viewing time in each of the program categories and the independent variables studied?
7. What is the nature of the relationship between the quality of viewing time and the independent variables studied?
8. When reading level (SDRT) is held as a dependent variable and Q, IQ, SES, sex and percentage of viewing time in each category are introduced as independent variables in a stepwise multiple regression, what is the nature of the relationship between the variables?

One hundred and twenty-three seventh and eighth grade students from the Middle School in High Bridge, New Jersey, participated in this study in the spring of 1980. Data was collected regarding sex, age, IQ, SES, SDRT (reading level), and viewing habits.

Discussion

Mean Viewing Times

An analysis of the results of this study revealed the mean weekly viewing time to be 17.45 hours per week. This is somewhat less than that reported in the majority

of previous studies. While Himmelweit found the average weekly viewing time to be 11-13 hours per week and Ridder 17.8, most other studies reported in excess of 20 hours per week.

The obtained weekly viewing average may also have been affected by a club trip taken on an evening during the week in which the study was conducted. This trip involved 40 students who participated in this study during that week.

The results of this study revealed that the seventh and eighth grade students surveyed, spent most of their viewing time watching Situation Comedy programs. This is not particularly surprising in light of the fact that a majority of the programs offered in a given evening are classified as Situation Comedies. On the other hand, only two Documentary programs were broadcast during the entire week of the study. So it follows that this was the least viewed category with an average of .04 hours per week.

It is difficult to relate this portion of the study to other studies regarding program preferences. Most previous studies reported students' stated program preferences, rather than an analysis of how viewing time was actually divided among the program categories.

Results revealed the overall quality of viewing time for the subjects of this study as 1.82, on a scale of 1-4,

low to high. Since previous studies regarding TV viewing have not attempted to assess "quality," no comparison to pre-existing literature can be made.

Contributing to the low quality of viewing could be the large portion of time devoted to Situation Comedies (approximately one-third, or 34%, of weekly viewing time) and their assessment as a category of low quality (1 on a scale of 1-4). Program categories of a higher quality (Educational, Documentary, News, rated 4 on scale of 1-4) comprised only 4.5% of total viewing time. The category rated as 1 comprised 54% or slightly more than half of the total weekly viewing time. Programs given a quality rating of 3 (Movies, Drama, and Talk Shows) comprised approximately 24% of total weekly viewing time. Programs rated as 2 (Game Shows, Sports, Adventure) made up 18% of weekly viewing time.

It must also be taken into consideration that given the programs as they are offered, it would not be possible to watch an entire evening of the highest quality programs (category 4), as they are not offered every hour. On the other hand, in many cases, it would be possible to spend an entire evening viewing Situation Comedies.

Effect of Sex on Variables Examined

A significant difference between the sexes with regard to reading achievement was revealed in this study, favoring females.

Previous research on the effect of sex on reading achievement has shown girls to be favored in primary grades, with sex differences in reading achievement significantly declining at grade six. The present seventh and eighth grade sample, however, continues to show a significant difference between the sexes.

Significant sex differences were also revealed with regard to viewing time in three program categories -- News, Sports, and Music/Variety. Boys watched significantly more News and Sports, while girls watched significantly more Music/Variety.

Previous research with regard to program preferences has indicated an effect by sex, but any further analysis has been superficial at best. Himmelweit (1958) simply reported preferences "seem to be affected by age, IQ, sex and emotional and intellectual maturity".

Particular sex differences are probably somewhat culturally related to sex role expectations. It is not especially surprising that boys would spend more time watching sports than girls, or that adolescent girls would enjoy Music/Variety programs featuring currently popular performers more than boys. It is also possible that boys view News programs more than girls in order to follow sports events.

Analysis of the sex differences with regard to quality of viewing time reveal a significant difference, with boys'

viewing time of a higher quality.

Previous research has not dealt with quality of viewing, making comparisons impossible.

Differences in quality of viewing between the sexes may be due to the differing rates of maturation or may be related to other environmental or cultural variables outside the scope of this study.

Effect of Grade Level on Selected Variables

An analysis of the differences between seventh and eighth graders on the variables examined in this study revealed significant differences on four of the variables. Eighth grade students scored significantly higher on SDRT. Since seventh and eighth graders take the same level of the test, it would be expected that an extra year of reading experience would contribute to a higher score on the SDRT.

A significant difference was revealed between seventh and eighth graders' parents with regard to socioeconomic status. The parents of eighth graders were of a significantly higher socioeconomic status than that of seventh grade parents.

It would be difficult, if not impossible, to speculate the causes for this difference without much more thorough research. It is also possible that this is purely a chance occurrence.

Seventh and eighth graders differed significantly in their watching of Game Shows. Seventh graders spent more time watching Game Shows than eighth graders.

Again, the lack of this type of previous research eliminates comparison to any earlier studies.

This difference may be accounted for by maturation. It is possible that the appeal of Game Shows declines with age and maturation. However, further research would be necessary to substantiate this. It is also possible that an individual's preference for Game Shows is just due to individual taste.

The percentage of total viewing time devoted to Cartoon/Fantasy programs also differed significantly between seventh and eighth graders, with seventh graders spending a larger percentage of weekly viewing time watching programs in this category than eighth graders.

As with the Game Show category, it is possible that the amount of viewing time in this category may be related to age or maturational level.

Relationship Between Total Weekly Viewing Time and Selected Variables

Results of this study revealed no significant relationships between total weekly viewing time and any of the selected variables.

Existing research dealing with viewing time and its relationship to these variables has yielded rather conflicting results. Comparisons to earlier research are difficult to achieve because of widely varying procedures used to gather data, varying age/grade levels used, and differing methods employed to assess academic or reading achievement.

Most research specifically regarding viewing time and academic or reading achievement has reported either no effects linked to television or non-significant correlations with negative tendencies.

Clark (1951), Ridder (1963), LaBlonde (1967), Childers and Ross (1973), and Quisenberry (1976) all reported no significant relationship between academic or reading achievement and time spent viewing television. Himmelweit (1958) reported a non-significant trend toward better school performance for non-viewers. Witty (1967) and Scott (1956) found little relationship between achievement and viewing time, except at the extremes, with higher achievement on part of those with lower viewing times. Starkey and Swinford (1974) reported a slight relationship between reading ability and amount of viewing time in favor of those watching less TV. Perney (1976) reported total viewing time correlating negatively with quantitative scores but positively with verbal scores on a standardized test. Slater (1965) reported a significant negative

correlation between TV viewing time and school achievement, as well as reading, and arithmetic achievement. Finally, one study, Greenstein (1954), reported results of a comparison between a group owning TV sets and a group who did not own sets. The students in the group owning TV sets achieved consistently higher in school than those without television. However, also in this study, it was found that students who watched less than the daily mean had higher grade point averages than those who watched more.

Most research regarding the relationship between IQ and viewing time has found a correlation between high IQs and low viewing times (Himmelweit, 1958; Schramm, 1965; Scott, 1956; Slater, 1965). The difference between these results and those of the existing study may be attributable to the varying age/grade levels studied in the research.

Schramm (1965) found at age 10-13 (fifth-eighth grades) that children with higher IQs begin to view less, while those with lower IQs become heavier viewers. This result was not evidenced, however, in the current study, or perhaps had not begun yet.

Only a few research studies exist in which the relationship between IQ and television viewing time has been examined.

Himmelweit (1958) and Lyle, Jack and Hoffman (1971), both reported no relationship between socioeconomic status

of the home and time spent viewing TV, while Scott (1956) and Slater (1965) both reported a significant inverse relationship between SES and viewing time.

In light of these conflicting research results, the findings of the present study can not really be considered to be inconsistent with previous studies.

The present findings regarding lack of sex differences and viewing time are consistent with earlier studies (Himmelweit, 1958; Schramm, 1965). It must be noted that these were the only studies which analyzed this particular variable in relation to viewing time.

It is difficult to relate the findings of this study with regard to age or grade level, to earlier research, because of the narrow scope of this present study (only seventh and eighth graders were included here), except to say that weekly viewing times were fairly consistent with those of other studies involving seventh and eighth graders.

Any correlation between age and viewing time would necessitate a study spanning multiple grade levels.

Other correlations made, but secondary in nature to this study, were included in Appendix B. Significant correlations were also reported in the results section. This analysis was included to provide additional information on this group of subjects. Since the obtained significant correlations yielded expected results no

further discussion will be included.

Relationship Between Viewing Time
in Each Program Category and
Independent Variables

The relationship between sex and grade and viewing time in each program category has essentially already been discussed in the respective sections dealing with the effect of grade and sex on the selected variables. Therefore, no further discussion of these relationships will be included here. Also, since age is closely correlated with grade, it is felt that no further insight would be gained regarding the primary purpose of this study to expand that examination. Consequently, the present discussion will focus on the relationship between IQ, SES, SDRT, and viewing in each program category.

Intelligence correlated positively with the viewing of Game Shows (.19) and Music/Variety (.24), percentage of Music/Variety (.19) and negatively with the viewing of Drama (-.20) and percentage of weekly viewing time devoted to Drama (-.16).

No previous research has dealt with this type of analysis, making comparisons to existing literature impossible.

While these correlation coefficients were statistically significant, their significance must be put in the proper perspective. For example, when the correlation

coefficient of .19 is squared and changed to a percent indicating the overlap between Game Shows and IQ, the resulting 4% indicates that only 4% of the variance between these two variables has been accounted for. The remaining 96% of the variance between viewing Game Shows and IQ needs to be accounted for by other variables not involved in the study. If the same is done for the other statistically significant correlations, the resulting 6%, 4%, 4%, and 2% of the variances, respectively, indicates that the relationship between these variables is actually for educational reasons rather minimal.

Similar results are found with the correlations between SES and viewing times in each category. SES correlated positively with viewing of Adventure (.17), Sports (.17), and percentage of time devoted to Adventure programs (.21). When each of these correlation coefficients is squared and converted to a percent, the results are 3%, 3%, and 4% respectively. Again, only a minor variance between these variables has been accounted for.

The variable of reading level (SDRT) was the one of primary interest in this study. SDRT correlated positively (.23) with viewing of Music/Variety programs and percentage of weekly viewing time spent on Music/Variety (.19) and negatively with the percentage of weekly viewing time spent on Cartoon/Fantasy (-.20) and Situation

Comedies (-.20). Conversion of these correlation coefficients to percents yields: 5%, 4%, 4%, 4%. Again, even though these correlation coefficients were statistically significant, this reveals that a very small percentage of the relationship to these variables is being accounted for by this correlation.

Relationship Between Quality
of Viewing Time and Selected
Variables Studied

Two correlations in this analysis proved to be statistically significant. Sex correlated -.24 with quality of TV viewing and SDRT correlated +.15 with quality.

While these proved to be statistically significant correlations, further analysis changes the initial interpretation of this data. When the correlation coefficient -.24 is squared and changed to a percent, it is revealed that only 6% of the variance between sex and quality of TV viewing has been accounted for. The correlation coefficient of +.15 indicates that 2% of relationship to reading level and quality of TV viewing has been accounted for by this relationship. All other correlations were statistically insignificant.

Comparisons to existing research are not possible since no research has examined quality of TV viewing time.

Relationship Between Reading Level
as a Dependent Variable (SDRT) and
Independent Variables in a Step-
wise Multiple Regression

Analysis of the results of the stepwise multiple regression revealed the following: Of the variables included in this analysis, IQ showed the strongest relationship to Reading level, with a correlation of .69 with 48% of the variance accounted for. Grade level was the next variable which showed a significant relationship to Reading level, accounting for an additional 5% of the variance to Reading level. The last variable to show a significant relationship to SDRT or Reading level was quality of TV viewing, accounting only for an additional 2% of the variance to Reading level. Once again, there is no previous research of this nature with which to compare this study.

When statistically significant correlation coefficients are analyzed in this manner, a truer picture of the real relationship between the variables is revealed. While quality of TV viewing did show up as bearing a statistically significant relationship to reading level, further analysis reveals that the relationship is actually extremely small. A total of 55% of the relationship to SDRT is accounted for by IQ, Grade level, and quality of TV viewing, with quality of viewing comprising only 2% of the relationship. A large portion remains unaccounted for.

Conclusions

This study led to the following conclusions:

1. The mean weekly viewing time for seventh and eighth grade High Bridge students is 17.45 hours per week. Approximately one-third (34.26%) of total weekly viewing time is devoted to Situation Comedies, while the least viewed category, Documentaries, accounts for only .25% of total weekly viewing time.
2. The overall quality of viewing time for subjects in this study is 1.82 using a scale of 1-4 (low to high).
3. Sex of the subject is related to reading achievement with girls scoring significantly higher. Sex is significantly related to three program categories. Boys spent significantly more time viewing News and Sports while girls spent significantly more time watching Music/Variety programs. Sex is also related to quality of TV viewing with girls viewing significantly higher quality programs.
4. Grade level is significantly related to reading level with eighth graders scoring higher on the SDRT. Parents of eighth graders in this study are of a significantly higher socioeconomic status than parents of seventh graders. Seventh

graders in this study spend significantly greater time viewing Game Shows than eighth graders. Seventh graders spend a larger percentage of their weekly viewing time watching Cartoon/Fantasy programs than eighth graders.

5. Total weekly viewing time is not related to any variables examined in this study.
6. Intelligence has a statistically significant relationship to viewing time of Game Shows, Music/Variety programs and Drama and percentage of weekly viewing time devoted to Drama. SES has a statistically significant relationship to viewing of Adventure, Sports and percentage of weekly viewing time devoted to Adventure programs. SDRT has a statistically significant relationship to viewing of Music/Variety programs, percentage of weekly viewing time devoted to Music/Variety programs, and percentage of weekly viewing time spent on Cartoon/Fantasy and Situation Comedies.
7. Quality of television viewing time has a statistically significant relationship to sex and reading level (SDRT).
8. In a stepwise multiple regression with reading level (SDRT) held as a dependent variable, IQ, Grade level and quality are significantly

related to reading level.

Suggestions for Further Research

Although numerous research studies relating reading or school achievement and television viewing time have been done, almost none have concentrated on the content or quality of that viewing time and its subsequent relationship to reading achievement. In this study, the quality of television viewing time had a statistically significant relationship to both sex and reading level. Further analysis, however, revealed that the amount of the relationship accounted for was actually rather small. Future research involving larger samples and spanning all age/grade levels is necessary to substantiate these results.

Varying methods of measuring the quality of television time must be explored to establish a reliable method.

Television programming must be more thoroughly assessed to determine the degree to which each program category is available for viewing over given periods of time.

While the relationship between quality of television viewing and reading achievement appears to be a relatively minor one, further research, possibly experimental in nature, is necessary to determine its long-term effects.

Further research must also address the area of program preferences. Why do students select what they do?

Finally, experimental manipulation of leisure time both for students of low as well as high reading achievement must be considered. What would happen if television viewing were restricted? What would students choose to do? What effect would this have on reading/school achievement?

REFERENCES

- Barth, R. J., & Swiss, T. The impact of television on reading. The Reading Teacher, 1976, 30, 236-239.
- Childers, P. R., & Ross, J. The relationship between viewing television and student achievement. The Journal of Educational Research, 1973, 66, 317-319.
- Clark, W. J. Of children and television. Cincinnati, Ohio: Xavier University, 1951.
- Feeley, J. T. Television and children's reading. Elementary English, 1973, 50, 141-148.
- Greenstein, J. Effect of television upon elementary school grades. The Journal of Educational Research, 1951, 48, 193-210.
- Himmelweit, H., Oppenheim, A. N., & Vince, P. Television and the child. London: Oxford University Press, 1958.
- Hornik, R. C. Television access and the slowing of cognitive growth. American Educational Research Journal, 1978, 15, 1-15.
- Jaronick, C. A study of the influence of outside interests, other mass media, grade level, and sex on children's television preferences. South Bend, Indiana: Indiana University, 1975. (ERIC Document Reproduction Service No. ED 112 876)
- LaBlonde, J. A. A study of the relationship between the television viewing habits and scholastic achievement of fifth grade children (Doctoral dissertation, University of Minnesota, 1966). Dissertation Abstracts International, 1967, 27, 2284A.
- Lehrer, S. G., & Cissna, K. N. L. Television viewing of selected sixth, seventh, and eighth grade students. Paper presented at the Annual Meeting of the International Communication Association, Chicago, Illinois, April 1978. (ERIC Document Reproduction Service No. ED 144 120)

- List, C. Television viewing and reading achievement in second grade. Union, N.J.: Kean College of New Jersey, 1978. (ERIC Document Reproduction Service No. ED 159 617)
- Lyle, J., & Hoffman, H. R. Television in the daily lives of children. Los Angeles: Department of Journalism, California University, 1971. (ERIC Document Reproduction No. ED 053 575)
- Mohr, P. J. Television, children, and parents. Kansas: Wichita State University, 1976. (ERIC Document Reproduction Service No. ED 158 730)
- Nielson, A. C. The fall tv season: Enter laughing. U. S. News and World Report, September 3, 1979, 51-52.
- Perney, J. et al. Television viewing: Its relationship to early school achievement. Evanston, Illinois: National College of Education, 1976. (ERIC Document Reproduction Service No. ED 153 723)
- Phelan, G., Jr., & Starkey, J. D. A survey of certain attitudes toward reading and television in fifth graders. DeKalb, Illinois: Northern Illinois University, 1975. (ERIC Document Reproduction Service No. ED 125 603)
- Quisenberry, N. I., & Klasek, C. B. The relationship of children's viewing to achievement at the intermediate level. Carbondale, Illinois: Office of Research and Projects, Southern Illinois University, 1976. (ERIC Document Reproduction Service No. ED 143 336)
- Ridder, J. M. Pupil opinions and the relationship of television viewing to academic achievement. The Journal of Educational Research, 1963, 57, 204-206.
- Schramm, W., Lyle, J., & Parker, E. B. Television in the lives of our children. Stanford, California: Stanford University Press, 1965.
- Scott, L. F. Television and school achievement. Phi Delta Kappan, 1956, 38, 25-28.

- Slater, B. R. An analysis and appraisal of the amount of televiewing, general school achievement, and socio-economic status of third grade students in selected public schools of Eric County, New York (Doctoral dissertation, 1960). Dissertation Abstracts International, 1965, 25, 5651-5652.
- Smith, N. B. Reading instruction for today's children. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963.
- Sorelle, Z., & Walker, J. What is television doing to our children? The Journal of Education Research, 1962, 55, 236-237.
- Starkey, J. D., & Swinford, H. L. Reading? Does television viewing time affect it? DeKalb, Illinois: Northern Illinois University, 1974. (ERIC Document Reproduction Service No. ED 090 966)
- Witty, P. Children of the television era. Elementary English, 1967, 44, 528-535.
- Witty, P. Children, tv and reading. The Reading Teacher, 1957, 11, 11-16.
- Witty, P. Interest in tv and success in school. Educational Administration and Supervision, 1951, 37, 193-210.
- Witty, P. Televiewing by children and youth. Elementary English, 1961, 38, 103-113.
- Witty, P., & Kinsella, P. J. A report on televiewing in 1961. Elementary English, 1962, 39, 24-32.
- Wood, R. W., & Eicher, C. E. An investigation of the television viewing habits of students in grades three through eight in Vermillion, South Dakota. Vermillion, South Dakota: South Dakota University, 1976. (ERIC Document Reproduction Service No. ED 141 858)

APPENDIX A

BACKGROUND DATA

ON SUBJECTS

Subject Number	M=1 F=2		AGE (Months)	SDRT	DIQ	SES	Viewing Times: ADV	CARTOON	DOCUM	DRAMA	EDUC	GAMES	MOVIE	NEWS	SIT/COM	SPORTS	TALK	MUSIC	TOTAL HOURS
	GRADE	SEX																	
001	7	1	153	25	89	76	4.0	3.0	-	9.0	-	0.5	5.5	5.0	6.5	1.0	4.5	1.0	40.0
002	7	1	162	34	84	76	.5	5.0	-	1.0	-	-	-	-	14.0	-	-	-	20.5
003	7	2	168	30	80	50	5.5	0.5	-	6.5	0.5	-	2.0	-	8.5	-	-	1.5	25.0
004	7	1	160	37	89	72	1.0	1.0	-	2.0	-	2.0	-	2.0	6.0	-	-	-	14.0
005	7	1	154	26	88	68	1.0	3.0	-	-	-	0.5	-	-	9.0	2.0	3.0	0.5	19.0
006	7	2	166	48	93	8	-	-	-	4.0	-	-	-	-	4.5	-	-	1.0	10.0
007	7	2	173	32	91	45	5.0	5.5	-	0.5	0.5	0.5	5.5	2.0	20.5	-	-	2.5	42.5
008	7	1	154	39	93	33	1.5	3.5	-	3.0	-	0.5	3.5	-	7.5	-	-	2.0	21.5
009	7	1	161	48	95	24	2.0	2.5	-	2.0	0.5	-	-	-	2.0	-	-	-	9.0
010	7	1	158	11	90	33	1.0	4.0	-	-	-	-	-	-	10.0	2.0	-	-	17.0
011	7	1	156	53	107	76	4.5	-	-	4.0	-	-	2.0	-	7.5	-	-	2.0	20.0
012	7	2	161	48	94	32	-	1.5	-	2.5	-	-	-	5.5	1.0	2.5	4.5	-	17.5
013	7	2	162	25	83	7	-	1.5	-	2.5	-	-	-	-	6.5	-	-	-	10.5
014	7	1	162	47	101	47	3.0	3.0	-	1.0	-	-	2.5	4.5	6.0	-	-	3.0	23.0

Subject Number	M=1 SEX		P=2 AGE (Months)	SDRT	DIQ	SES	Viewing Times: ADV	CARTOON	DOCUM	DRAMA	EDUC	GAMES	MOVIE	NEWS	SIT/COM	SPORTS	TALK	MUSIC	TOTAL HOURS
	GRADE																		
015	7	2	161	32	79	8	-	-	-	-	-	-	-	-	1.0	-	-	-	1.0
016	7	1	163	29	90	8	3.0	-	-	-	-	-	3.5	-	2.0	3.0	-	-	11.5
017	7	2	156	56	125	52	-	0.5	-	1.0	-	-	7.0	-	2.0	-	-	2.0	12.5
018	7	1	152	51	95	25	1.0	-	-	-	0.5	-	5.0	-	4.0	-	-	-	10.5
019	7	1	162	51	104	79	2.0	1.5	1.0	-	-	-	3.0	1.0	10.0	-	-	4.0	22.5
020	7	2	151	44	92	22	1.0	-	-	-	-	-	-	-	4.5	-	-	1.0	6.5
021	7	1	150	48	95	61	-	-	-	-	-	-	-	-	1.0	2.0	-	-	3.0
022	7	1	159	51	107	24	1.0	2.5	-	2.0	-	2.5	-	1.0	11.5	-	-	-	20.5
023	7	2	149	56	130	46	1.0	3.0	-	0.5	-	5.0	5.0	1.0	6.0	-	-	4.0	25.5
024	7	2	157	54	99	8	-	-	-	-	-	-	-	-	-	-	-	-	-
025	7	1	162	56	112	61	3.0	-	-	4.5	-	0.5	2.0	-	12.5	-	-	-	22.5
026	7	1	157	47	89	53	-	-	-	-	1.0	-	3.5	-	4.5	-	-	1.5	10.5
027	7	1	155	44	96	25	-	3.0	-	-	-	-	4.0	0.5	1.0	4.5	-	-	13.0
028	7	2	150	54	102	76	2.0	-	-	4.0	-	-	-	-	8.5	-	-	1.0	15.5

Subject Number	M=1 F=2		AGE (Months)	SDRT	DIQ	SES	Viewing Times: ADV	CARTOON	DOCUM	DRAMA	EDUC	GAMES	MOVIE	NEWS	SIT/COM	SPORTS	TALK	MUSIC.	TOTAL HOURS
	GRADE	SEX																	
029	7	2	153	55	110	68	-	5.0	-	3.0	-	1.0	4.0	1.0	15.5	2.0	1.0	4.0	36.5
030	7	2	156	47	105	8	-	3.0	-	5.5	-	2.0	7.5	-	6.0	-	-	3.0	27.0
031	7	1	159	55	103	35	-	-	-	3.5	-	-	4.5	-	2.0	1.5	-	5.0	16.5
032	7	2	156	44	89	8	4.0	1.0	-	3.5	-	-	1.5	-	11.0	-	-	-	21.0
033	7	1	154	55	109	8	3.0	3.0	-	3.5	-	0.5	2.0	7.0	3.5	1.5	-	2.5	26.5
034	7	1	152	54	98	65	2.0	-	-	-	-	-	-	1.5	2.0	-	-	-	5.5
035	7	2	165	57	98	19	-	3.0	-	5.5	-	-	-	2.5	5.5	-	-	-	16.5
036	7	2	156	53	106	47	2.0	10.5	-	2.0	-	3.0	-	-	9.5	2.0	-	-	29.0
037	7	2	153	56	115	85	-	-	-	1.0	-	-	1.0	-	0.5	-	-	-	2.5
038	7	1	152	56	134	76	3.5	1.0	-	2.0	-	-	-	-	4.0	-	-	-	10.5
039	7	2	147	57	111	76	-	-	-	-	-	-	-	-	-	-	-	1.0	1.0
040	7	1	155	48	109	66	5.0	5.0	-	5.0	-	1.0	3.5	-	7.5	-	-	-	27.0
041	7	2	150	57	123	72	0.5	0.5	1.0	-	-	1.0	-	-	7.0	-	-	3.0	13.0
042	7	2	159	58	112	60	5.0	1.0	-	3.0	-	-	-	-	3.0	3.0	-	4.0	19.0

Subject Number	GRADE	M=1 F=2	AGE (Months)	SDRT	DIQ	SES	Viewing Times: ADV	CARTOON	DOCUM	DRAMA	EDUC	GAMES	MOVIE	NEWS	SIT/COM	SPORTS	TALK	MUSIC	TOTAL HOURS
		SEX																	
043	7	1	157	59	102	78	4.0	-	-	-	-	1.0	-	-	0.5	3.5	-	-	9.0
044	7	1	160	54	114	24	2.0	-	-	-	0.5	-	2.5	-	5.5	-	-	-	10.5
045	7	1	152	53	106	33	1.0	1.5	-	2.0	-	1.0	-	1.0	-	4.5	-	-	11.0
046	7	2	150	57	112	49	1.0	4.5	1.0	1.0	-	0.5	-	-	6.0	-	-	3.0	17.0
047	7	2	153	58	139	76	2.0	2.5	-	1.0	0.5	1.5	-	2.0	6.5	3.0	3.0	1.0	24.0
048	7	1	157	52	106	62	1.0	-	-	2.5	-	0.5	1.0	0.5	3.0	3.0	-	-	11.5
049	7	2	154	49	105	61	3.0	3.5	-	5.0	-	-	-	-	9.0	-	-	2.5	23.0
050	7	1	160	46	105	76	2.0	2.5	-	-	-	-	-	-	-	-	-	-	4.5
051	7	2	161	56	116	76	1.0	-	-	1.0	-	-	2.0	0.5	2.0	-	1.5	1.0	9.0
052	7	1	157	50	113	76	3.0	-	-	1.0	-	-	-	-	0.5	-	-	1.5	6.0
053	7	1	159	52	108	76	3.0	-	-	6.0	0.5	-	2.0	2.5	3.5	2.0	-	3.0	22.5
054	7	2	158	55	110	77	4.0	10.0	-	-	-	2.0	-	-	11.5	2.5	-	4.0	34.0
055	7	2	151	57	119	47	2.0	5.5	-	1.5	0.5	5.0	13.0	1.5	6.0	3.5	-	4.0	42.5
056	7	1	152	57	121	76	-	-	-	-	-	-	-	-	-	-	-	-	-

Subject Number	M=1 F=2		AGE (Months)	SDRT	DIQ	SES	Viewing Times: ADV	CARTOON	DOCUM	DRAMA	EDUC	GAMES	MOVIE	NEWS	SIT/COM	SPORTS	TALK	MUSIC	TOTAL HOURS
	GRADE	SEX																	
057	7	2	160	56	111	25	4.0	1.5	-	2.5	-	-	-	0.5	12.5	-	3.5	-	24.5
058	7	2	160	58	119	44	1.0	1.0	-	1.5	-	-	-	-	3.5	-	-	2.0	9.0
059	7	2	153	58	121	76	-	1.5	-	-	-	-	-	-	8.0	-	-	1.0	10.5
060	8	1	165	53	97	79	1.0	5.5	-	5.5	-	1.0	6.5	0.5	25.5	2.5	-	-	48.0
061	8	1	174	53	92	76	2.5	-	-	2.0	-	-	2.0	1.0	2.5	-	-	1.0	11.0
062	8	2	164	49	100	52	4.0	-	-	3.0	-	0.5	-	-	6.5	-	-	2.0	16.0
063	8	2	183	49	93	52	4.0	-	-	2.5	-	-	0.5	-	7.0	-	-	3.0	17.0
064	8	1	166	49	102	66	-	-	-	-	-	-	2.0	-	-	5.0	-	-	7.0
065	8	2	162	46	91	51	-	2.5	-	-	-	-	1.0	1.5	10.5	-	2.5	-	18.0
066	8	1	164	32	102	8	-	2.5	-	-	-	-	4.0	-	4.0	-	-	-	10.5
067	8	2	169	59	106	33	2.0	1.0	-	3.0	-	-	-	4.0	2.5	-	-	3.0	15.5
068	8	1	174	57	99	22	-	1.0	-	-	-	0.5	5.0	-	6.0	-	-	-	12.5
069	8	2	162	54	100	59	-	2.5	-	2.5	-	-	1.0	-	6.5	-	1.5	1.0	14.0
070	8	1	178	53	97	76	4.0	-	1.0	4.0	-	-	-	-	2.5	2.0	-	-	13.5

Subject Number	GRADE	M=1 F=2		AGE (Months)	SDRT	DIQ	SES	Viewing Times: ADV	CARTOON	DOCUM	DRAMA	EDUC	GAMES	MOVIE	NEWS	SIT/COM	SPORTS	TALK	MUSIC	TOTAL HOURS
		SEX																		
071	8	1	187	22	76	8	-	-	-	0.5	-	0.5	-	-	1.0	-	-	1.5	3.5	
072	8	2	171	49	94	24	3.0	6.5	-	7.0	-	0.5	4.0	0.5	12.5	-	-	3.5	38.5	
073	8	1	164	43	98	65	2.5	-	-	2.0	-	0.5	2.5	-	4.5	-	-	1.0	13.0	
074	8	1	173	60	116	44	1.0	-	-	-	-	-	2.0	-	1.0	2.0	-	-	6.0	
075	8	1	166	53	104	47	1.0	0.5	-	1.0	-	-	7.5	-	6.0	2.5	-	-	18.5	
076	8	1	167	56	107	65	-	2.5	-	3.0	-	-	4.0	2.5	7.5	5.5	-	3.5	28.5	
077	8	1	173	57	106	78	4.0	2.0	-	2.0	1.5	0.5	3.5	2.5	21.0	-	-	0.5	37.5	
078	8	2	166	54	97	65	1.0	-	-	1.0	-	-	2.0	-	2.5	-	-	1.0	7.5	
079	8	2	172	52	102	66	1.5	-	-	-	-	-	-	-	3.0	-	-	0.5	5.0	
080	8	1	172	57	105	48	2.0	5.5	-	6.0	-	-	2.0	-	9.0	-	-	3	27.5	
081	8	1	174	53	95	71	-	0.5	-	4.0	-	-	-	9.0	3.0	9.0	4.5	2.0	32.0	
082	8	1	168	54	102	78	-	-	-	1.0	-	-	5.0	0.5	11.0	3.0	1.5	-	22.0	
083	8	1	166	52	98	62	-	2.5	-	-	-	-	2.0	-	3.0	4.0	-	-	11.5	
084	8	1	178	49	91	62	1.0	-	-	4.0	-	0.5	-	0.5	-	1.0	-	2.0	9.0	

Subject Number	GRADE	SEX	M=1 F=2	AGE (Months)	SDRT	DIQ	SES	Viewing Times: ADV	CARTOON	DOCUM	DRAMA	EDUC	GAMES	MOVIE	NEWS	SIT/COM	SPORTS	TALK	MUSIC	TOTAL HOURS
085	8	1		173	46	96	65	7.5	-	-	4.0	-	-	-	0.5	11.0	-	-	-	23.0
086	8	1		165	58	124	77	-	1.5	-	3.0	1.0	0.5	2.0	5.0	4.0	-	3.0	3.0	23.00
087	8	2		160	55	106	44	2.0	-	-	5.5	-	-	1.0	-	28.0	1.5	-	4.5	42.5
088	8	1		162	49	110	61	3.0	7.0	-	3.0	-	-	5.0	8.5	8.5	5.0	-	2.0	42.0
089	8	1		172	55	105	15	-	0.5	-	2.0	-	-	2.0	2.0	3.0	-	-	4.0	13.5
090	8	2		167	56	107	61	1.0	-	-	2.0	-	0.5	-	-	1.5	-	-	1.5	6.5
091	8	1		169	56	102	76	-	-	-	-	-	-	-	2.5	0.5	1.5	1.0	1.0	6.5
092	8	2		164	47	105	76	-	1.0	-	2.5	1.0	0.5	1.5	-	15.0	1.5	-	0.5	23.5
093	8	2		163	54	102	76	-	2.0	-	-	-	-	1.5	2.5	9.5	4.0	3.0	2.0	24.5
094	8	2		173	47	92	8	4.0	0.5	-	5.0	-	1.5	3.0	-	7.0	-	-	-	21.0
095	8	2		162	58	104	49	-	1.0	-	-	-	1.0	1.0	-	2.0	-	-	1.0	6.0
096	8	2		172	58	107	33	3.05	0.5	1.0	2.0	-	0.5	4.0	1.0	7.0	-	-	1.0	20.5
097	8	1		168	49	108	76	2.0	-	-	3.0	-	-	2.0	-	6.5	-	-	1.0	14.5
098	8	1		171	57	115	47	-	-	-	-	-	-	-	-	7.5	1.0	-	1.0	9.5

Subject Number	GRADE		AGE (Months)	SDRT	DIQ	SES	Viewing Times: ADV	CAPTOON	DOCUM	DRAMA	EDUC	GAMES	MOVIE	NEWS	SIT/COM	SPORTS	TALK	MUSIC	TOTAL HOURS
	M=1 SEX	F=2																	
099	8	2	164	59	106	51	2.0	-	-	4.5	-	-	3.5	0.5	6.5	-	1.5	2.0	20.5
100	8	2	172	59	127	76	-	-	-	-	-	-	-	-	4.5	-	-	2.5	7.0
101	8	1	160	59	118	76	3.0	0.5	-	1.0	-	-	3.0	-	4.5	-	-	1.0	13.0
102	8	2	171	50	108	78	6.0	5.0	-	3.0	-	0.5	2.0	-	15.0	-	-	2.0	33.5
103	8	2	184	55	108	47	1.0	2.5	-	5.5	-	0.5	8.5	-	6.5	-	-	0.5	25.0
104	8	2	166	54	108	76	0.5	-	-	1.5	-	0.5	4.0	-	5.0	1.5	-	3.5	16.5
105	8	1	171	55	117	76	1.5	6.0	-	3.5	-	0.5	2.5	-	20.0	2.0	-	3.0	39.0
106	8	2	167	55	114	87	3.0	-	-	1.5	-	-	-	-	2.5	-	-	-	7.0
107	8	2	165	58	136	48	5.5	-	-	1.0	-	-	-	-	4.0	3.5	-	1.5	15.5
108	8	2	162	58	104	33	2.0	4.5	-	2.0	-	0.5	3.5	-	11.5	-	-	3.0	27.0
109	8	1	167	57	113	82	1.0	-	-	-	-	-	2.5	-	6.0	-	-	-	9.5
110	8	2	169	60	112	50	-	-	-	1.0	-	-	-	-	1.0	1.0	-	3.0	6.0
111	8	2	163	56	109	54	3.0	-	-	4.0	-	-	-	-	11.5	-	-	3.0	21.5
112	8	2	172	59	127	44	-	-	-	-	-	0.5	-	0.5	-	2.0	-	2.5	5.5

Subject Matter	M=1 F=2		AGE (Months)	SDRT	DIQ	SES	Viewing Times: ADV	CARTOON	DOCUM	DRAMA	EDUC	GAMES	MOVIE	NEWS	SIT/COM	SPORTS	TALK	MUSIC	TOTAL HOURS
	GRADE	SEX																	
113	8	2	163	54	122	76	4.0	-	-	-	1.0	-	2.5	-	8.0	1.0	-	3.5	20.0
114	8	1	183	46	87	87	7.0	5.0	-	6.0	-	-	2.0	-	10.5	4.0	-	3.0	37.5
115	8	1	167	55	115	76	4.0	1.0	-	-	-	-	2.0	-	10.0	0.5	-	-	17.5
116	8	2	165	56	103	76	2.5	1.5	-	3.0	-	-	3.5	-	10.0	-	3.0	-	23.5
117	8	2	173	55	112	72	2.5	3.0	-	3.0	-	-	2.0	0.5	4.0	-	-	0.5	15.5
118	8	1	167	55	110	68	1.0	-	-	2.5	0.5	-	2.0	-	6.0	-	-	1.0	13.0
119	8	1	163	54	113	76	3.0	0.5	-	2.0	-	0.5	-	3.5	6.0	11.5	-	3.0	30.0
120	8	2	164	48	94	79	-	-	-	1.5	-	-	-	-	1.0	-	-	1.5	3.0
121	8	1	164	59	109	74	2.0	1.0	-	1.0	-	-	3.5	1.0	0.5	1.0	-	2.0	20.0
122	8	2	162	58	112	76	5.0	-	-	0.5	-	1.0	-	-	1.5	2.5	-	-	10.5
123	8	2	166	60	118	84	-	-	-	1.0	-	-	2.0	-	1.0	0.5	-	1.5	6.0

APPENDIX B

ADDITIONAL CORRELATIONS BETWEEN VIEWING
TIMES AND SELECTED VARIABLES
BY GRADE LEVEL AND SEX

INTERCORRELATIONS BETWEEN TOTAL HOURS OF VIEWING TIME AND
SELECTED VARIABLES FOR SEVENTH AND EIGHTH GRADERS
BY GRADE LEVEL

	Sex	Age	DIQ	SES	SDRT	Hours
Sex	7th	-.00	.18	-.15	.21	.14
	8th	-.16	.15	-.13	.19	.14
Age	7th		-.43 ^b	-.28 ^a	-.35 ^b	.16
	9th		-.36 ^b	-.21 ^a	-.29 ^b	-.05
DIQ	7th			.40 ^b	.74 ^b	.02
	8th			.24 ^a	.64 ^b	-.08
SES	7th				.25 ^a	.04
	8th				.30 ^b	.10
SDRT	7th					-.13
	8th					.01
Hours						

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

INTERCORRELATIONS BETWEEN TOTAL HOURS OF VIEWING TIME AND SELECTED
VARIABLES FOR SEVENTH AND EIGHTH GRADERS BY SEX

		Grade	Age	DIQ	SES	SDRT	Hours
Grade	M		.78 ^b	.11	.21	.29 ^b	.21
	F		.67 ^b	.03	.24 ^a	.26 ^a	-.07
Age	M			-.19	.05	.09	.13
	F			-.23 ^a	-.05	-.11	.01
DIQ	M				.23 ^a	.67 ^b	-.01
	F				.49 ^b	.74 ^b	-.03
SES	M					.30 ^b	.26 ^a
	F					.42 ^b	-.09
SDRT	M						.00
	F						-.19
Hours							

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

CORRELATIONS BETWEEN PROGRAM CATEGORY VIEWING TIMES AND SELECTED
VARIABLES FOR SEVENTH AND EIGHTH GRADERS
BY GRADE LEVEL

		ADV	CF	DOC	DRA	EDUC	GAME
Sex	7th	-.13	.17	.08	.05	-.07	.18
	8th	.10	-.11	.01	.06	-.05	.19
Age	7th	.25 ^a	.03	-.13	.17	.18	-.25 ^a
	8th	.14	.01	.20	.25 ^a	-.07	.05
DIQ	7th	.01	.02	.16	-.13	-.07	.32 ^b
	8th	.01	-.11	-.06	-.29 ^a	.20	.13
SES	7th	.19	.03	.16	-.05	-.04	.02
	8th	.15	-.04	-.05	-.06	.22	-.24 ^a
SDRT	7th	-.07	-.12	.15	-.09	-.03	.17
	8th	-.05	-.09	.07	-.06	.05	-.10

86

		MOV	NEWS	SIT/COM	SPORTS	TALK	MUSIC
Sex	7th	.00	-.10	.17	-.14	.10	.25 ^a
	8th	-.19	-.28 ^a	-.01	-.37 ^b	-.07	.18
Age	7th	-.03	.10	.28 ^a	-.13	-.02	-.07
	8th	-.02	-.06	-.14	-.12	-.14	-.01
DIQ	7th	.08	-.05	-.11	.03	-.01	.30 ^a
	8th	-.04	.01	-.05	.06	-.10	.16
SES	7th	-.13	-.09	.05	.01	.10	.16
	8th	-.11	.07	.09	.25 ^a	.17	-.11
SDRT	7th	-.02	-.04	-.25 ^a	-.00	-.15	.25 ^a
	8th	.04	.06	-.01	.08	.06	.15

		PC ADV	PC CF	PC DOC	PC DRA	PC EDUC	PC GAME
Sex	7th	-.34 ^b	-.00	.12	.13	-.20	.05
	8th	.18	-.06	-.03	.17	-.03	.16
Age	7th	.09	.05	-.18	.22	.09	-.25 ^a
	8th	.06	-.08	.21	.27 ^a	-.12	.15
DIQ	7th	.09	-.00	.18	-.03	-.11	.29 ^a
	8th	.10	-.13	-.08	-.33 ^b	.24	-.17
SES	7th	.24 ^a	.00	.15	-.07	-.10	.06
	8th	.20	-.19	-.01	-.00	.22 ^a	-.32 ^b
SDRT	7th	.08	-.14	.16	.08	.01	.18
	8th	.05	-.14	.05	-.13	.04	-.24

PC = Percentage

		PC MOV	PC NEWS	PC SIT/COM	PC SPORTS	PC TALK	PC MUSIC
Sex	7th	-.08	-.12	.19	-.28 ^a	.16	.24 ^a
	8th	-.22 ^a	-.25 ^a	.10	-.29 ^b	-.05	.27 ^a
Age	7th	-.05	.09	.15	-.17	.04	-.28 ^a
	8th	-.08	-.00	-.14	-.09	-.17	.16
DIQ	7th	.10	-.07	-.27 ^a	-.08	.03	.25 ^a
	8th	.02	-.00	.03	.16	-.11	.09
SES	7th	-.13	-.09	-.17	-.00	.08	.21
	8th	-.16	.04	.03	.15	.17	-.17
SDRT	7th	.06	.06	-.30 ^a	-.01	-.07	.27 ^a
	8th	.04	.12	-.06	.14	.06	-.01

PC = Percentage

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

CORRELATIONS BETWEEN PROGRAM CATEGORY VIEWING TIMES AND SELECTED
VARIABLES FOR SEVENTH AND EIGHTH GRADERS BY SEX

		ADV	CF	DOC	DRA	EDUC	GAME
Grade	M	-.09	-.02	-.01	.05	-.02	-.21 ^a
	F	.14	-.27 ^a	-.08	.06	-.01	-.23 ^a
Age	M	.04	-.04	.15	.13	.00	-.14 ^b
	F	.26 ^a	-.14	-.15	.25 ^a	-.00	-.31 ^b
DIQ	M	.07	-.11	-.04	-.03 ^b	.08	-.08
	F	-.04	-.01	.13	-.37 ^b	.09	.28 ^a
SES	M	.29 ^b	-.01	.16	.23 ^a	.02	-.08
	F	.05	-.04	-.00	-.33 ^b	.18	-.05
SDRT	M	.01	-.25 ^a	.05	.02	.14	-.08
	F	-.13	-.06	.15	-.20	-.22 ^a	.11

		MOV	NEWS	SIT/COM	SPORTS	TALK	MUSIC
Grade	M	.19	.10	.18	.26 ^a	.07	.15
	F	-.01	-.16	.10	-.07	-.10	.04
Age	M	-.01	-.00	.16	.07	-.03	.20
	F	.07	.02	.02	-.17	-.10	-.09
DIQ	M	.00	.06	.00	-.01 _b	-.13	.09 _b
	F	.08	-.05	-.16	.39 ^b	.01	.32 ^b
SES	M	-.13	.05	.24	.15	.23 ^a	.05
	F	-.10	-.20	-.04	.17	.02	.13
SDRT	M	.08	.07	-.03 _a	.11 _a	-.17	.17 _a
	F	-.01	-.01	-.23 ^a	.22 ^a	.05	.23 ^a

		PC ADV	PC CF	PC DOC	PC DRA	PC EDUC	PC GAME
Grade	M	-.27 ^a	-.21 ^a	.03	.01	-.16	-.17
	F	.25 ^a	-.30 ^a	-.12	.03	.04	-.06
Age	M	-.16	-.18	.18	.18	-.12	.03
	F	.24 ^a	-.20	-.19	.20	-.00	-.23 ^a
DIQ	M	.19	-.10	-.05	-.01 _b	-.01	-.24 ^a
	F	.03	-.02	.15	-.34 ^b	.11	.29 ^a
SES	M	.24 ^a	-.13	.15	.12	-.12	-.18
	F	.15	-.12	.02	-.15	.20	-.04
SDRT	M	.10	-.31 ^b	.06	.05	.09	-.20
	F	.02	-.02	.14	-.12	-.17	.19

PC = Percentage

		PC MOV	PC NEWS	PC SIT/COM	PC SPORTS	PC TALK	PC MUSIC
Grade	M	.14	.05	.05	.08	.11	.14
	F	.03	-.10	-.06	.12	-.11	.06
Age	M	-.02	-.03	.05	-.08	-.00	.33 ^b
	F	.04	.07	-.04	.04	-.09	-.12
DIQ	M	.03	.03	.05 ^b	-.04 ^b	-.09	-.09
	F	.16	-.04	-.36 ^b	.40 ^b	-.01	.27 ^a
SES	M	-.34 ^b	.06 ^a	.04	.05	.25 ^a	-.13
	F	.08	-.23 ^a	-.17	.12	.02	.23 ^a
SDRT	M	.10	.15	-.10 ^b	.10	-.11	-.02
	F	.12	.05	-.43 ^b	.26 ^a	.04	.30 ^a

PC = Percentage

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

CORRELATIONS BETWEEN QUALITY OF TELEVISION VIEWING
TIME AND SELECTED VARIABLES FOR SEVENTH AND
EIGHTH GRADERS BY GRADE LEVEL

		Quality
Sex	7th	.20
	8th	.29 ^b
Age	7th	.08
	8th	.07
DIQ	7th	.05
	8th	-.12
SES	7th	.07
	8th	.08
SDRT	7th	.16
	8th	.12
Hours	7th	.09
	8th	.03

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

CORRELATIONS BETWEEN QUALITY OF TELEVISION VIEWING
TIME AND SELECTED VARIABLES FOR SEVENTH
AND EIGHTH GRADERS BY SEX

		Quality
Grade	M	.07
	F	.03
Age	M	.04
	F	.18
DIQ	M	.04
	F	.03
SES	M	
	F	.02 .06
SDRT	M	.28 ^a
	F	.13
Hours	M	.01
	F	.05

^aSignificant at .05 level of confidence.

^bSignificant at .01 level of confidence.

COURSE WORK FOR MASTER'S DEGREE IN READING

Fall 1977

Instructor

15:299:515	Teaching Reading for Secondary, College and Other Adult Students	Dr. Kling
------------	--	-----------

Spring 1978

15:299:561	Foundations of Reading Instruction	Dr. Fry
------------	---------------------------------------	---------

Summer 1978

15:299:564	Remedial Reading	Dr. Zelnick
15:299:565	Laboratory in Remedial Reading	Dr. Zelnick

Fall 1978

15:290:540	Introduction to Learning	Dr. Gillooly
------------	--------------------------	--------------

Spring 1979

15:290:514	Introduction to Adolescent and Young Adult Years	Dr. Montare
------------	---	-------------

Summer 1979

17:610:521	Materials for Children	Dr. Greene
17:610:522	Materials for Young Adults	Dr. Broderick

Fall 1979

15:299:566	Seminar in Reading Research and Supervision	Dr. Kling
------------	--	-----------